สำนักงานการบินพลเรือนแห่งประเทศไทย
The Civil Aviation Authority of Thailand

Guidance Material for the Preparation of Dangerous Goods Section in the Operation Manual - Other Entities Organization

CAAT-GM-OPS-DGOEO

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Approved by

Air Chief Marshal
Manat Chavanaprayoon
Director General of the Civil Aviation Authority of Thailand

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0. Introduction

0.1 Background

Guidance Material (GM) is issued by the Civil Aviation Authority of Thailand and contain information about standards, practices and procedures required to be complied.

0.2 Purpose

This GM provides guidance in developing the manual of procedures for dangerous goods to shippers, freight forwarders, handling Agent, Regulated Postal Authority and other entities related to operating regarding transport of dangerous goods by air which required on operations manual or Standard Operating Procedure (SOP) as minimum are stated in content outline chapter 0.6.

0.3 Applicability

This GM is applicable to shippers, freight forwarders, handling Agent, Regulated Postal Authority and other entities organization related to operating regarding transportation of dangerous goods by air. This requirement is in accordance with RCAAT no. 68 and no. 73 and the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air.

Note: 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.

0.4 Requirements

0.4.1 The Contracting State shall establish inspection, surveillance, and enforcement procedures for all entities performing functions as prescribed in the Thai regulations concerning the transport of dangerous goods by air, with the objective of ensuring compliance with such regulations. These requirements apply to all entities involved in the air transport dangerous goods supply chain.

0.4.2 Entities involved in the transport of dangerous goods by air shall comply with the relevant Thai regulations concerning dangerous goods, as follows: RCAAT No. 68 and No. 73

0.5 Reference

The following Thailand regulations for transport of dangerous goods by air are directly applicable to the guidance contained in this GM

- Air Navigation Act B.E. 2497, as amended by the Air Navigation Act (No. 14) B.E. 2562, Chapter 1/3 Regulation of Transport of Dangerous Goods and Prohibited or Special Handling Items.
- Notification of The Civil Aviation Authority of Thailand on Classification and List of Dangerous Goods Which May Endanger the Safety of The Aircraft or Persons on Board the Aircraft B.E. 2562
- Notification of The Civil Aviation Authority of Thailand on Classification and List of Dangerous Goods Which May Endanger the Safety of The Aircraft or Persons on Board the Aircraft no. 2 B.E. 2564
- Requirement of the Civil Aviation Authority of Thailand no.68 Application for and issuance of permission for operating Dangerous Goods and Prohibited or Special Handling Items 2024”
- Requirement of the Civil Aviation Authority of Thailand no. 73 “the operations regarding the Transportation of Dangerous Goods and Prohibited or Special Handling Items. 2024”
- Current edition of the ICAO - Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI).
- Current edition of the IATA Dangerous Goods Regulations

0.6 Content Outline

The Applicant must identify the type of company and area of operations to establish process and procedure concerning company's dangerous goods operations. This content as minimum requirements for describing in Operations Manual or Standards Operating Procedure (SOP) are:

Content	Category			
	a	b	c	d
1) Dangerous Goods Compliance Practices	√	√	√	√
1.1 Policy on the transport of Dangerous Goods	√	√	√	√
1.2 Scope	√	√	√	√
1.3 Definition	√	√	√	√
1.4 Abbreviations	√	√	√	√
1.5 Commitment Statement	√	√	√	√
1.6 Amendments to Manual	√	√	√	√
2) Organization Structure	√	√	√	√
2.1 Company Profile	√	√	√	√
2.2 Nature of business	√	√	√	√
2.3 Physical Characteristics of Premises used for Storage of Dangerous Goods	√	√	√	√
2.4 Organizational Structure	√	√	√	√
2.5 Dangerous Goods Coordinator	√	√	√	√
2.6 Relevant Person Responsibilities	√	√	√	√

2.7 Quality Management System	√	√	√	√
3) Operational Procedures	√	√	√	√
3.1 Classification	√	√	√	√
3.2 Dangerous Goods Package	√	√	√	√
3.3 Dangerous Goods Marking	√	√	√	√
3.4 Dangerous Goods Labels	√	√	√	√
3.5 Safety Data Sheet (SDS)	√	√	√	√
3.6 Dangerous Goods Transport Documentation	√	√	√	√
3.7 Recognition of Undeclared / Hidden Dangerous Goods	√	√	√	√
3.8 Globally Harmonized System (GHS) Labelling	√	√	√	√
3.9 Preparing Dangerous Goods Shipment	√	△	-	-
3.10 Receiving Dangerous Goods Shipment from Shipper/Freight Forwarder	-	√	-	-
3.11 Transportation to Airport	√	△	-	-
3.12 Dangerous Goods Acceptance for Transport	-	-	√	√
3.13 Verification of the List of Dangerous Goods Operating License or Registration Certificate of Dangerous Goods Operator	-	-	√	√
3.14 Random and Unpredictable Security Controls	-	-	√	√
3.15 Examining and completing dangerous goods transport documents	-	-	√	√
3.16 Dangerous Goods Audit Trail	-	-	√	√

3.17 Rejected/Returned Dangerous Goods	-	-	√	√
3.19 Risk/Vulnerability Assessments	-	-	√	√
3.21 Information to the Pilot-in-Command	-	-	√	√
3.22 Emergency Response Information	√	√	√	√
3.23 Removal Contamination			√	√
3.24 Dangerous Goods Reporting Requirements	√	√	√	√
4) Dangerous Goods Security	√	√	√	√
4.1 Prohibited Articles	√	√	√	√
4.2 High Consequence Dangerous Goods	√	√	√	√
4.3 Premises, staff and access control and control of permits	√	√	√	√
4.4 Protection of IT Systems	√	√	√	√
4.6 Safeguarding, storage and maintenance of records	√	√	√	√
4.7 Personnel Records	√	√	√	√
5) Dangerous Goods Training	√	√	√	√
5.1 General	√	√	√	√
5.2 Approval of Dangerous Goods Training Programmes	√	√	√	√
5.3 General Requirements Applicable to Dangerous Goods Training Programmes	√	√	√	√
5.4 Objective of Dangerous Goods Training	√	√	√	√

5.5 Recurrent Training	√	√	√	√
5.6 Dangerous Goods Training Record	√	√	√	√
5.7 Instructor Qualifications	√	√	√	√

Category

a) Shipper
b) Freight Forwarder
c) Handling Agent
d) Regulated Postal Authority

Note

1. " √ " is require for applicant to establish process or procedure
2. " - " is not required
3. " Δ " is optional depend on applicant operations

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1 Dangerous Goods Compliance Practices.

1.1. Policy on the Transport of Dangerous Goods

Editorial Note 1: *The following text indicates where the organization needs to add text to describe their specific operation. The editorial notes must be replaced with the operator's own text before submission to the CAAT.*

Editorial Note 2: *The following text makes numerous references to the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions). Should the organization have decided to use the IATA Dangerous Goods Regulations (latest edition) instead of the International Civil Aviation Organization Technical Instruction for the safe Transport of Dangerous Goods by air (ICAO Doc 9284 AN/905), references to the ICAO Technical Instructions (latest edition) should be amended accordingly*

1.1.1. Approval for the Registration Certificate Dangerous Goods Operator or Dangerous Goods Operating License (RCAAT no.63 Chapter 4, Article 19 (1) and Chapter 9 Article 48)

Dangerous goods can only be carried according to the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions), irrespective of whether the flight is wholly or partly within or wholly outside the territory of a State. Organizations that operate regarding the transport of dangerous goods by air must be registered certificate for dangerous goods operators with CAAT, except as identified in 1.2 General exception and 1.2.7 Items that may be carried by passengers and crews below. An additional approval or an exemption may be required to permit the transport of some dangerous goods (see 1.1.2 Forbidden Dangerous Goods below

Editorial Note 1: Insert Text *- [Company Name (Pty)] holds a CAAT approval to the registration certificate dangerous goods operator or Dangerous Goods Operating License.*

Editorial Note 2: *Should the Operator's policy prohibit the carriage of certain dangerous goods (e.g. radioactive material) these restrictions should be stated.*

Editorial Note 3: Insert Text - *the following [person or post holder] is assigned responsibility for the Approval held: [Contact information, or designated person(s), job and their role(s) with respect to the administration of the company's dangerous goods program]*

1.1.2. Forbidden Dangerous Goods (ICAO TI 1; 1.1, 2.1 7; 4.2 IATA DGR 2.1, 1.4.2, RCAAT no. 73 Article 19 (2))

Any article or substance which, as presented for transport, is liable to explode, dangerously react, produce a flame or dangerous evolution of heat or dangerous emission of toxic, corrosive or flammable gases or vapours under conditions normally encountered in transport must not be carried on aircraft under any circumstance.

Certain dangerous goods known to meet the description above have been included in the Dangerous Goods List (Doc 9284 Table 3-1 or IATA DGR Tabel 4.2) with the word "Forbidden" shown in columns. It must be noted, however, that it would be impossible to list all dangerous goods which are forbidden for transport by air under any circumstance. Therefore, it is essential that appropriate care be exercised to ensure that no goods meeting the above description are offered for transport.

Dangerous Goods are forbidden, intended to include articles being returned to the manufacturer for safety reasons.

Certain dangerous goods, which are normally forbidden, may be specifically approved for air transport by the State of Origin and the State of the Operator (CAAT):

- To transport dangerous goods forbidden on passenger and/or cargo aircraft where Special Provision A1/A2 applies; or Special Provision A1/A2 applies; or
- for other purposes as specified in the ICAO Technical Instructions; provided that in such instances an overall level of safety in transport which is at least equivalent to the level of safety provided for in the Technical Instructions is achieved.

In instances of extreme urgency or when other forms of transport are inappropriate or full compliance with the prescribed requirements is contrary to public interest, the States concerned may grant an exemption from the provisions of the Technical Instructions provided that in such instances an overall level of safety in transport which is at least equivalent to the level of safety provided for in the Technical Instructions is achieved. For the purposes of exemptions, "States concerned" are the States of Origin, Operator, transit, overflight and destination. For the State of overflight, if none of the criteria for granting an exemption are relevant, an exemption may be granted based solely on whether it is believed that an equivalent level of safety in air transport has been achieved.

For example, since controls exist for quantities of some explosives which may be carried to or from specific airfields in Thailand, Air operators must seek advice from CAAT as to the suitability of the

intended airfield of loading and unloading when Class 1 dangerous goods are being carried under an A2 Approval.

Dangerous goods carried in accordance with an exemption or approval must comply with the conditions on the exemption or approval, as well as those on the permanent approval unless these have been varied by the exemption or further approval

1.2 Scope

The provisions of this Dangerous Goods used by:
All personnel employed by ***Company Name (Pty)*** Ltd are allocated to prepare and classify of dangerous goods in all branches of ***Company name (Pty)*** Ltd;
All contracted or third-party service providers contracted to ***Company name (Pty)*** Ltd and handling dangerous goods or related documentation; and
Any person seeking access to the dangerous goods designated areas of ***Company name (Pty)*** Ltd cargo facilities.

1.3 Definition

Where terms used in this GM are defined in CAAT 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 the transport of dangerous goods operations. As far as possible the terms used in this document are those which have the widest international use.

"Appropriate national authority" *means* Any authority designated, or otherwise recognized, by a State to perform specific functions related to provisions contained in these Instructions. **"Approval"** means an authorization granted by the Director General of the Civil Aviation Authority of Thailand under article 13 for:

a) the transport of forbidden dangerous goods on passenger and/or cargo aircraft where the Technical Instructions state that such goods can only be carried with approval; or

b) any other purposes as provided in the Technical Instructions granted by the director general and shall be accordance with technical instruction supplement.

"Aviation Inspector" means Dangerous Goods Inspector-ASI-OPS-DGI that appointed by the Director General in accordance with the announcement of the Civil Aviation Authority of Thailand on Air Safety Inspector.

"Baggage" means the personal property of passengers or crew carried on an aircraft by agreement with the operator.

"Cargo" means any property carried on an aircraft other than mail and accompanied or mishandled baggage.

"Cargo aircraft" means Any aircraft, other than a passenger aircraft, which is carrying goods or property.

"Combination packaging" means a combination of packaging for transport purposes, consisting of one or more inner packaging secured in an outer packaging in accordance with the relevant provisions of ICAO TI Part 4.

"Competent authority" means anybody or authority designated or otherwise recognized as such for any purpose in connection with these Instructions.

Note. - This applies to radioactive material only

"Consignment" means one or more packages of dangerous goods accepted by an operator from one shipper at one time and at one address, receipted for in one lot and moving to one consignee at one destination address.

"Operations concerning Dangerous goods and Prohibited or Special Handling Items" means of receiving, storing, loading, unloading or transporting dangerous goods and prohibited or special handling items on board an aircraft

"Receiving" means the operation of receiving dangerous goods or prohibited or special handling items include inspecting and verifying the accuracy and completeness of documents, packaging, marking and labeling to shall be in accordance with Technical Instruction before accepting them for air transport.

"Storage" means the temporary storage of dangerous goods and prohibited or special handling items before loading them onto an aircraft, which shall be conducted in defined designated secure places and shall be in accordance with Technical Instruction.

"Loading" means the operation of loading dangerous goods and prohibited or special handling items from the storage area onto the aircraft for transport, by placing them appropriately in accordance with Technical Instruction for safety during the flight.

"Unloading" means the operation of unloading dangerous goods and prohibited or special handling items from the aircraft in accordance with Technical Instruction.

"Transport" means the operation of transporting dangerous goods and prohibited or special handling items on an aircraft, with safety measures during the flight and compliance with Technical Instruction and relevant regulations.

"Dangerous Goods and Prohibited or Special Handling Items Operating License" means a license for operations related to receiving, storage, loading, unloading or transporting dangerous goods and prohibited or special handing items on board an aircraft under Article15/27 or Article15/29

"Dangerous Goods" means articles or substances which are capable of posing a hazard to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or Prescribed as dangerous goods by the General Director under Section 15/28 (1).

"Dangerous Goods Acceptance Checklist" means a document used to assist in the examination of the outer appearance of dangerous goods packaging and related documents to determine whether all relevant requirements have been met;

"Dangerous goods accident" means an occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property or environmental damage;

"Dangerous goods incident" means an occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property or environmental damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants is also deemed to be a dangerous goods incident.

"Dangerous Goods Serious Incident" means an incident involving circumstances indicating that there was a high probability caused by dangerous goods, which is stipulated by the Aircraft Accident Investigation Committee.

"Dangerous goods security" means measures or precautions to be taken by operators, shippers and others involved in the transport of dangerous goods aboard aircraft to minimize theft or misuse of dangerous goods that may endanger persons or property.

"Dangerous Goods Transport Document" means a document which is specified by the Technical Instructions and contains information about the dangerous goods it accompanies.

"Director General" means Director General of the Civil Aviation Authority of Thailand

"Exception" means a provision in ICAO Technical Instruction and Annex 18 or this Part which excludes a specific item of dangerous goods from the requirements normally applicable to that item.

"Exemption" means an authorization, other than an approval, granted by an appropriate national authority providing relief from the provisions of the Technical Instructions.

"Freight container" means see unit load device.

Note. - For the definition of freight container for radioactive material, see 2;7.1.3.

"Freight Forwarder" means a organization who offers the service of arranging the transport of cargo, mail, baggages or other items by air.

"Handling Agent" means an organization assigned to act on behalf of the air operator's functions in receiving, storing, loading, unloading, or carrying out other any passengers or cargo related operations whole or partially.

"ID number" means a temporary identification number for entries in Table 3-1 – Dangerous Goods List – which have not been assigned a UN number.

"Incompatible" means describing dangerous goods which, if mixed, would be liable to cause a dangerous evolution of heat or gas or produce a corrosive substance.

"Inner packaging" means a packaging for which an outer packaging is required for transport.

"Inner receptacle" means a receptacle which requires an outer packaging in order to perform its containment function.

"Intermediate bulk container (IBC)" means any rigid or flexible portable packaging, other than those specified in Part 6;3 of these Instructions, as described in Chapter 6.5 of the UN Model Recommendations, that is designed for mechanical handling and is resistant to the stresses produced in handling and transport, as determined by tests.

> Note. - IBCs are only authorized by these Instructions for UN 3077, Environmentally hazardous substance, solid, n.o.s. as provided in Packing Instruction 956.

"Intermediate packaging" means a packaging placed between inner packagings or articles and an outer packaging.

"International System of Units (SI)" means a rational and coherent system of units which provides the basis for the units of measurement used for air and ground operations as contained in Annex 5 to the Convention on International Civil Aviation.

"ISO" (standard) means an international standard published by the International Organization for Standardization (ISO – 1, ch. de la Voie-Creuse, CH-1211 Geneva 20, Switzerland).

"Jerrican" means a metal or plastic packaging of rectangular or polygonal cross-section

"Mail" means any letters or parcels which are delivered by Thailand Post or by authorized organizations, shall comply with the regulations of the Universal Postal Union;

"Net explosive mass (NEM)" *means* the total mass of the explosive substances, without the packagings, casings, etc. (net explosive quantity (NEQ), net explosive contents (NEC), or net explosive weight (NEW) are often used to convey the same meaning).

"Net quantity" means either:

a) the mass or volume of the dangerous goods contained in a package excluding the mass or volume of any packaging material; or
b) the mass of an unpackaged article of dangerous goods (such as UN 3166).

For the purposes of this definition, "dangerous goods" means the substance or article as described by the proper shipping name shown in Table 3-1, such as for "Fire extinguishers", the net quantity is the mass of the fire extinguisher. For articles packed with equipment or contained in equipment, the net quantity is the net mass of the article, such as for lithium ion batteries contained in equipment, the net quantity is the net mass of the lithium ion batteries in the package.

"Operator" means a person, organization or enterprise engaged in or offering to engage in an aircraft operation.

"Outer packaging" means the outer protection of a composite or combination packaging together with any absorbent materials, cushioning and any other components necessary to contain and protect inner receptacles or inner packagings.

"Overpack" means an enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage.

Note. - A unit load device is not included in this definition.

"Package" means the complete product of the packing operation, consisting of the packaging and its contents prepared for transport.

"Packaging" means one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions.

Note. - For radioactive material, see ICAO TI Part 2;7.1.3.

"Passenger aircraft" means an aircraft that carries any person other than a crew member, an operator's employee in an official capacity, an authorized representative of an appropriate national authority or a person accompanying a consignment or other cargo.

"Pilot-in-command" means the pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

"Prohibited or Special Handling Items" means Prohibited or Special Handling Items which may endanger the Safety of the aircraft or persons on board the aircraft, as designated by the Director General as Prohibited or Special Handling Items under Section 15/30 (1).

"Proper shipping name" means the name to be used to describe a particular article or substance in all shipping documents and notifications and, where appropriate, on packaging

"Public Aerodrome Operator" means the owner or operator of a licensed aerodrome providing services to the public, or the holder of a public airport operating certificate.

"Quality assurance" means a systematic programme of controls and inspections applied by any organization or body which is aimed at providing adequate confidence that the standard of safety prescribed by these Instructions is achieved in practice.

"Receptacle" means a containment vessel for receiving and holding substances or articles, including any means of closing.

"Relevant Persons in the transport of dangerous goods" means those engaged in the transport of dangerous goods as specified in Section 5.

"Relevant Persons in the Transport of prohibited or special handling items" means those engaged in the transport of prohibited or special handling items as specified in Section 5.

"Safety management system (SMS)" means A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

"Salvage packaging" means a special packaging into which damaged, defective, leaking or nonconforming dangerous goods packages, or dangerous goods that have spilled or leaked, are placed for purposes of transport for recovery or disposal.

"Serious injury" means an injury which is sustained by a person in an accident and which: requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or results in a fracture of any bone (except simple fractures of fingers, toes or nose); or involves lacerations which cause severe hemorrhage, nerve, muscle or tendon damage; or involves injury to any internal organ; or involves second- or third-degree burns, or any burns affecting more than 5 per cent of the body surface; or involves verified exposure to infectious substances or injurious radiation.

"Shipper" means the person who signs the contract of carriage with operator for the carriage of goods and whose signature appears on the air waybill or shipment record

"Shipper's Declaration for Dangerous Goods" means a specific document detailing the class and division, list of dangerous goods, UN or ID number, packing group, quantity of dangerous goods, and the shipper's signature in according with Technical Instruction.

"Shipment" means the specific movement of a consignment from origin to destination

"Single packaging" means a packaging which does not require any inner packaging to perform its containment function during transport

"State of Destination" means the State in the territory of which the consignment is finally to be unloaded from an aircraft.

"State of Operator" means the state in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

"State of Origin" means the State in the territory of which the consignment is first to be loaded on an aircraft.

"State of Registry" means the State on whose register the aircraft is entered

"Radioactive Material" means any element or compound whose a component of its atomic structure is unstable and decays by releasing radiation, either existing in nature or created from a production or use nuclear material, from a production by a radiation generator, or from any other processes, not including radioactive material with a characteristics of nuclear material or radioactive material together with any contaminated solids, liquids, and gases within the packaging.

"UN or ID number" means the four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods to identify a substance or a particular group of

substances. “ID number” means an identification number specified in the Technical Instructions for an item of dangerous goods which has not been assigned a UN number;

“Unit load device” means any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo

“Technical instructions” means the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc. 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council.

1.4 Abbreviations

ICAO – International Civil Aviation Organization
IATA – International Air Transport Association
IAEA – International Atomic Energy Agency
UN – United Nations
CAAT – The Civil Aviation Authority of Thailand
DGI – Dangerous Goods Inspector
ICAO TI – Technical Instructions for the Safe Transport of Dangerous Goods by Air (DOC 9284)
DGR – Dangerous Goods Regulations

1.5 Commitment Statement

I declare that, To the best of my knowledge, the information contained in *Company name (Pty)Ltd* Procedures Manual 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 will be adjusted and adapted to comply with all future relevant changes to DG-CAAT Regulations, unless *Company name (Pty)Ltd* informs the Civil Aviation Authority of Thailand that it no longer wishes to convey dangerous goods by air.

Company name (Pty) Ltd will inform CAAT in writing of: minor changes / deviation to its Procedures Manual at least within 10 working days; and 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 CAAT 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

Company name (Pty)Ltd will inform CAAT 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 or Authorize Person

1.6 Amendments to Manual

1.6.1 All amendments to an approved Dangerous Goods Manual or procedure for transport of dangerous goods shall be submitted to CAAT for approval before being affected. The organization will always operate in accordance with an approved Manual.

1.6.2 The Dangerous Goods Manual or procedure for transport of dangerous goods may not be altered or amended without the written approval of the CAAT and of the person or position that undersigned the compliance undertaking as contained in the Procedures Manual.

1.6.3 Where a revision of this programme is affected, the following steps will be followed:

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

1.6.4 Each holder of a copy of the Dangerous Goods Manual or procedure for transport of dangerous goods is responsible for verifying that all pages listed on the covering letter have been received.

1.6.5 The control, amendment and distribution of the Dangerous Goods Manual or procedure for transport of dangerous goods or any subsequent amendments will be made by the Dangerous Goods Coordinator.

1.6.6 The Dangerous Goods Coordinator shall be responsible for the distribution of copies of the Dangerous Goods Manual or procedure for transport of dangerous goods, amendments thereof or any subsequent Emergency Amendments.

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2. Organizational Structure

2.1 Company Profile

Company name (Pty)Ltd (Head Quarters)

Full address: ...

2.2 Nature of business:

Please choose the type of business

- ○ Shipper
- ○ Freight Forwarder
- ○ Handling Agent
- ○ Regulated Postal Authority

2.3 Physical Characteristics of Premises used for Storage of Dangerous Goods

Type(s) of Warehouse:

- leased and not shared with other companies

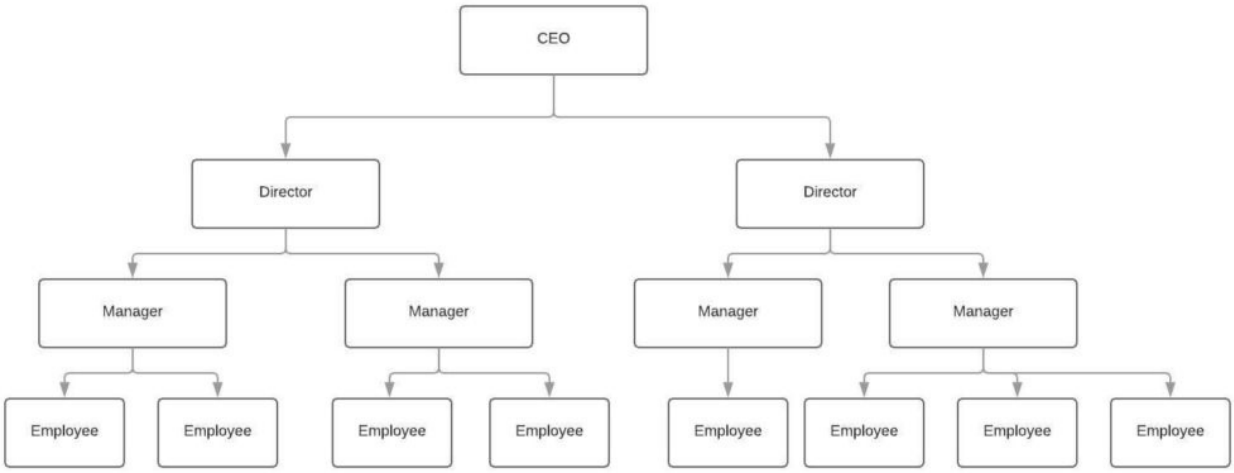
Address (es) of dangerous goods processing / storage area(s):

No.	Location	Site location	Address
1	Administration	Head Office	
2	Location Site 2		
3	Location Site 3		
4	Location Site 4		
5	Location Site 5		

2.4. Organizational 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. The hierarchy and reporting lines of all structures that pertain to aviation safety.

Organizational structure example



2.5 Dangerous Goods Coordinator

2.5.1 The holders of dangerous goods operating license and the holders of certificate for dangerous goods operator shall appoint a person or more for being dangerous goods coordinators.

2.5.2 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 the CAAT Regulations.

2.5.3 Communication between CAAT and ***Company name (Pty) Ltd*** should be directed to this official. This official is senior enough in the organization 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: **Dangerous Goods Coordinator**

ID Number:

Phone:

E-mail:

2.5.4 Duties should cover the roles outlined as follows:

a) Having knowledge and comprehension of dangerous goods regulations and receiving appropriate training in dangerous goods training programe relevant to their responsibilities.
b) Providing consultation to the executive and personnel who have responsibility for the transport of dangerous goods.
c) Coordination with CAAT aviation inspectors in carrying out regarding dangerous goods.
d) Establishing operations procedures or operations manual including other related documents and updating such procedures or manual continually.

2.5.5 Additional responsibilities may include the following:

a) The development, amendment and implementation of the overall dangerous goods operation manual or standard operation procedures.
b) The development and promulgation of companywide Dangerous Goods safety standards and practices to ensure compliance with RCAAT no. 73.
c) Ensuring that effective risk assessment and analysis are conducted regularly and that there is sufficient response capability in case of incidents and accidents

d) Ensuring understanding of legislation and regulations relating to Dangerous Goods throughout the organization.
e) Providing specialized advice to line management in all aviation safety functions regarding dangerous goods.
f) Ensuring all staff dealing with dangerous goods and related documentation are trained and proper control of training records are established and maintained.
g) Ensuring appointment of suitably qualified persons as dangerous goods officials in the respective branches of *(Company name) (Pty) Ltd* in a case where multiple branches exist.
h) Ensuring all dangerous goods transport documents are retained according to the requirements

2.6 Relevant Person Responsibilities

2.6.1.Shippers and Freight Forwarder

a) 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.
b) Shall 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
c) Shall provide information to the employees as will enable them to carry out their responsibilities with regard to the transportation of dangerous goods by air
d) Shall ensure that the articles or substances are not prohibited for transport by air.
e) Shall 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
f) Shall 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.
g) Shall ensure that dangerous goods are packed in compliance with all applicable air transport requirements in line with packing instructions.
h) Shall hold the registration certificate for dangerous goods operator.

2.6.2. Air Operator

a) Accept the transport of dangerous goods by air from shippers or freight forwarders who hold the registration certificate for dangerous goods operators only.

b) Not accept the transport of dangerous goods by air unless the dangerous goods are accompanied by completed dangerous goods transport documentation, except where the Technical Instructions indicate that such documentation is not required

c) Shall carry out regarding dangerous goods as specified in the dangerous goods operating license

d) Air operators involved regard to the transportation of dangerous goods by air must comply in accordance with the provisions of the Technical Instructions.

Their responsibilities include:

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

2.6.3. Visitors

a) 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 authorized representative.

b) 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.

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

2.7 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.

Intentionally Left Blank

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

3.1.1 Dangerous Goods are defined as those goods which meet the criteria of one or more of 9 Hazard Classes and where applicable, to one of 3 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 classes which may endanger the safety of the Aircraft or persons on board the Aircraft to the following.

Class 1: Explosives

Division 1.1: Substances and articles which have a mass explosion hazard

Division 1.2: Substances and articles which have a projection hazard but not a mass explosion hazard

Division 1.3: Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard

Division 1.4: Substances and articles which present no significant hazard

Division 1.5: Very insensitive substances which have a mass explosion hazard

Division 1.6: Extremely insensitive articles which do not have a mass explosion hazard

Class 2: Gases

Division 2.1: Flammable gases

Division 2.2: Non-flammable, non-toxic gases

Division 2.3: Toxic gases

Class 3: Flammable liquid

Class 4: Flammable solids; substances liable to spontaneous combustion; substances which, on contact with water, emit flammable gases

Division 4.1: Flammable solids, self-reactive and related substances and solid desensitized explosives and polymerizing substances

Division 4.2: Substances liable to spontaneous combustion

Division 4.3: Substances which, in contact with water, emit flammable gases

Class 5: Oxidizing substances and organic peroxides

Division 5.1: Oxidizing substances

Division 5.2: Organic peroxides

Class 6: Toxic and infectious substances

Division 6.1: Toxic substances

Division 6.2: Infectious substances

Class 7: Radioactive material

Class 8: Corrosive substances

Class 9: Miscellaneous dangerous substances and articles, including environmentally hazardous substances which, during air transport, present a danger to the safety of the aircraft or persons on board the aircraft is not covered by Class (1) to (8) in according to notifications to prescribe by the Director General.

3.1.2 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.

3.2 Dangerous Goods Package

The Dangerous Goods where applicable are packed correctly as follows:

a) The dangerous goods are packed in compliance with all applicable air transport requirements including:
b) inner packaging and the maximum quantity per package limits;
c) appropriate types of packaging according to the packing instructions;
d) other applicable requirements indicated in the packing instructions including:
    1) single packaging may be forbidden;
    2) only inner and outer packaging indicated in the packing instructions are permitted;
    3) inner packaging may need to be packed in intermediate packaging; and
    4) certain dangerous goods must be transported in packaging meeting a higher performance level.
e) appropriate closure procedures for inner and outer packaging
f) the compatibility requirements as specified in the applicable packing instructions
g) the absorbent materials requirements in the packing instructions when applicable; and
h) the pressure differential requirement
i) The overpack must not contain packages enclosing different substances which might react dangerously with each other or packages of dangerous goods which require segregation according to IATA DGR Table 9.3.A. In addition packages containing UN 3090, lithium metal batteries prepared in accordance with Section IA or Section IB of PI 968 and UN 3480, lithium ion batteries prepared in accordance with Section IA or Section IB of PI 965 are not permitted in an overpack with packages containing dangerous goods classified in Class 1 other than Division 1.4S, Division 2.1, Class 3, Division 4.1 or Division 5.1
j) Each package contained within an overpack must be properly packed, marked, labelled and be free of any indication of damage or leakage and in all respects be properly prepared as required in these Regulations. Packages must be secured within the overpack.

Single Packaging	Packaging which does 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
Overpack	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

3.3 Dangerous Goods Marking

3.3.1 All necessary markings of Dangerous Goods must comply with the Regulations.

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

3.3.3 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.

3.3.4 Required Markings are:

a) UN or ID Number and Proper Shipping Name
b) Full Name and Address of Shipper and Consignee
c) 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
d) Handling Label - give an additional information on how to handle, store or load Dangerous Goods
e) The net quantity or gross weight as applicable for all classes (except ID8000, Class 7) (for non-identical consignments of more than one package)
f) The net quantity for UN 1845 Carbon dioxide, solid (Dry Ice)
g) For Infectious Substance (Division 6.2) the Name and Telephone Number of Responsible Person
h) Package orientation labels (or pre-printed), “KEEP UPRIGHT”, “DO NOT DROP–HANDLE WITH CARE” for refrigerated liquefied gases
i) UN3373: BIOLOGICAL SUBSTANCE CATEGORY B” and the diamond shaped mark from PI 650
j) Chemical oxygen generators (when S.P. A144 applies) “Air Crew Protective Breathing Equipment (smoke hood) in accordance with Special Provision A144”
k) Limited quantity mark for limited quantity packaging
l) The word “SALVAGE” for salvage packaging 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
m) Environmentally hazardous substance mark for environmentally hazardous substances
n) Consolidated packages – multi packages from more than one person
o) “Not Restricted” – if the package does not fall into the criteria of classification
p) “Overpack” – if overpack used

Note 1: Should any of the above points be overlooked, the consignment will be rejected and returned to the Shipper immediately

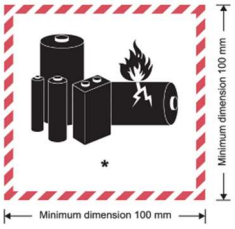
Note 2: Example of the Hazard and Handling Labels and Marks as attached in appendix E

3.3.5 Marks on dangerous goods packages prepared for transport by air aid in identifying the shipper, consignee and the description of the dangerous goods articles or substances within the package. The various marks applicable to the transport of dangerous goods by air and their descriptions are illustrated as follows:

Marking

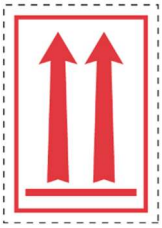
Limited Quantities Mark

Environmentally Hazardous Substance Mark

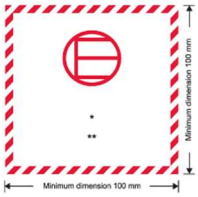


Battery Mark

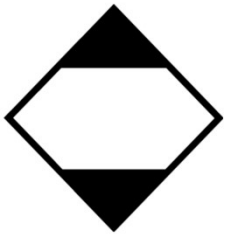
* Place for UN number(s)



Package Orientation



Excepted Quantity Package Mark



Surface Limited Quantities Mark

Biological substances Category B Mark

Genetically modified microorganisms (GMMOs) and organisms (GMOs) Genetically modified microorganisms Mark

3.4 Dangerous Goods Labels

Marks and labels are used to identify dangerous goods and communicate their hazards, handling and other information to operations personnel when such goods are transported by air as cargo consignments. Consequently, the presence of such marks and labels on the outer surface of packages intended for transport by air would suggest that its contents meet the criteria for classification as dangerous goods.

3.4.1 Hazard Labels

Some dangerous goods may have more than one hazardous characteristic and multiple dangerous goods articles or substances may also be packed in multiple inner packaging within an outer packaging. To communicate all the hazards of dangerous goods present within a package, dangerous goods transport regulations require applicable hazard labels to be affixed to the outer surface of packages containing such goods. Hazard labels are set in a diamond shape and recognizable by its symbol, class/division number and color representing the various hazards within the nine classes of dangerous goods. The hazard labels used in the transport of dangerous goods by air and their descriptions are illustrated as follows:

Class 1 - Explosive

Explosive
(Divisions 1.1, 1.2, 1.3)

Explosive
(Division 1.4)

Explosive
(Division 1.5)

Explosive
(Division 1.6)

*** Place for Division and Compatibility Group, for example "1.1C".**

Class 2 - Gases

Flammable (Division 2.1)

Non-flammable, non-toxic (Division 2.2)

Toxic (Division 2.3)

Class 3 - Flammable Liquids

Class 4 - Flammable Liquids

Flammable Solids (Division 4.1)

Substances Liable to Spontaneous Combustion (Division 4.2)

Substances which in Contact with Water Emit Flammable Gases (Division 4.3)

Class 5 - Oxidizing Substances and Organic Peroxides

Oxidizing Substances (Division 5.1)

Organic Peroxides (Division 5.2)

Note: This label may also be printed with symbol (flame), text, numbers and borderline shown in black on red background.

Class 6 - Toxic and infectious substances

Toxic Substances (Division 6.1)

Infectious Substances (Division 6.2)

Note: The lower part of Division 6.2 label should bear the inscription: INFECTIOUS SUBSTANCE In case of Damage or Leakage Immediately Notify Public Health Authority

Class 7 - Radioactive Material

Category I–White

Category II–Yellow

Category III–Yellow

Criticality Safety Index Label

Class 8 - Corrosives

Class 9 - Miscellaneous Dangerous Goods

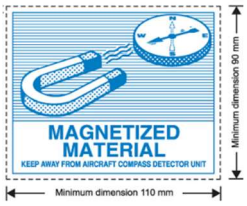
Miscellaneous Dangerous Goods

Lithium Batteries or Sodium Ion Batteries

3.4.2 Handling Labels

Handling labels affixed to dangerous goods packages are intended to communicate handling requirements or the nature of the dangerous goods. It should be noted that not all dangerous goods packages require handling labels. Unlike hazard labels, handling labels are set in a rectangle shape. The handling labels used in the transport of dangerous goods by air and their descriptions are illustrated as follows:

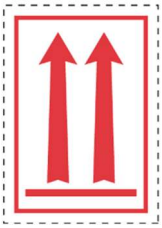
Handling Labels



Magnetized Material

Cargo Aircraft Only

Cryogenic Liquids



Package Orientation

Keep Away From Heat

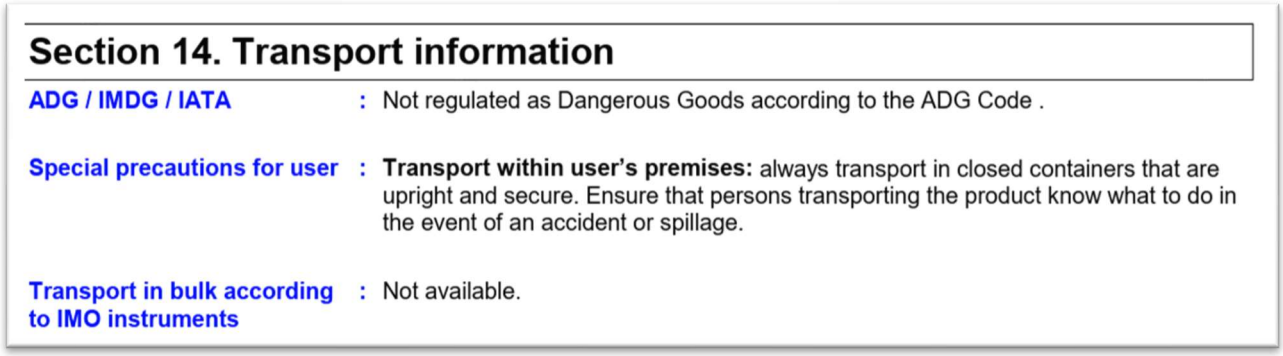
Radioactive Material - Excepted Package

An example of a dangerous goods package containing a single substance prepared for transport by air on cargo aircraft only and affixed with all the relevant marks and labels is illustrated as follows:

3.5 Safety Data Sheet (SDS)

The SDS includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. The information contained in the SDS must be in English (although it may be in other languages as well). The SDS preparers may also include additional information in various sections. Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., firefighting). This information should be helpful to those that need to get the information quickly. Sections 9 through 11 and 16 contain other technical and scientific information, such as physical and chemical properties, stability and reactivity information, toxicological information, exposure control information, and other information including the date of preparation or last revision. The SDS must also state that no applicable information was found when the preparer does not find relevant information for any required element.

The SDS must also contain Sections 12 through 15, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.
A description of all 16 sections of the SDS, along with their contents, is presented in appendix B
The following are sample extracts of information found in Section 14 of the SDS for two chemical substances. Sample SDS Extract of a Non-Dangerous Goods Substance The following is an extract from an SDS for the substance Ferric Ammonium Sulfate.



Section 14. Transport information

ADG / IMDG / IATA	:	Not regulated as Dangerous Goods according to the ADG Code .
Special precautions for user	:	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Transport in bulk according to IMO instruments	:	Not available.

Based on the transport information in this SDS, the substance is not classified as dangerous goods and may be offered for transport as a general cargo consignment. It should be noted that non-flammable, non-toxic gases may appear has as "Not Restricted" or "Not Regulated" on some SDS.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

UN Shipping Description: UN1203, GASOLINE, 3, II

IMO/IMDG Shipping Description: UN1203, GASOLINE, 3, II, FLASH POINT SEE SECTION 9, MARINE POLLUTANT (GASOLINE)

ICAO/IATA Shipping Description: UN1203, GASOLINE, 3, II

Domestic Regulatory Information
Land Regulatory Information: subject to the provisions of the Fire Service Act
Maritime Regulatory Information: subject to the provisions of the Ship Safety Act
Aviation Regulatory Information: subject to the provisions of the Civil Aeronautics Act

Based on the transport information in this SDS, the substance is classified as dangerous goods meeting the classification criteria for Class 3 – Flammable Liquid. It may only be offered for transported by air when a consignment containing this substance has complied with the applicable packing, marking, labelling and documentation requirements of the ICAO TI.

Note: Safety Data Sheets in a uniform format that includes the section numbers, headings, and associated information as Appendix xxx.

3.6 Dangerous Goods Transport Documentation

3.6.1 General

a) The person who offers dangerous goods for transport by air must provide the air operator the information applicable to the consignment as set out in this paragraph.
b) Shipper's Declaration for Dangerous Goods shall provide to the operator two copies, completed and signed. The signatory has been trained according to their responsibilities.
c) Shall be provided Safety Data Sheet (SDS) or Material Safety Data Sheet (MSDS) or the authentication report issued by dangerous goods authentication
d) Shall ensure that the dangerous goods described in the dangerous goods transport document, Safety Data Sheet or the report is identical to the contents of the consignment

3.6.2 Shipper's Declaration for Dangerous Goods

a) A Shipper's Declaration for Dangerous Goods may be in any form, provided it contains all of the information required by these Instructions.
b) If both dangerous and non-dangerous goods are listed in one document, the dangerous goods must be listed first or otherwise be emphasized.
c) Continuation page. Shipper's Declaration for Dangerous Goods may consist of more than one page, provided pages are consecutively numbered.
d) The information on a Shipper's Declaration for Dangerous Goods must be easy to identify, legible and durable

Note: information required on the shipper's declaration for dangerous goods must contain the following IATA DGR 8.1

3.6.3 Air Waybill

Handling Information is required i.e. Air Waybill must have the following information: "Dangerous Goods as per associated shipper's declaration or Dangerous Goods as per associated 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

If an article or substance could be suspected of being a dangerous goods, but does not meet the criteria for any of the hazard classes or divisions, it may be offered for transport as not restricted with the inclusion of a statement such as "not restricted", "non-hazardous" or "non-dangerous" in the description of the article or substance on the air waybill to indicate that it has been checked. The statement "Not restricted, as per Special Provision Axx" must be included in the description of the article on the air waybill when required, to indicate that the special provision has been applied.

3.6.4 Dangerous Goods Acceptance Checklist

Before a consignment consisting of a package or overpack containing dangerous goods, a freight container containing radioactive material or a unit load device containing dangerous goods is first accepted for carriage by air, the operator must, by use of a checklist for verification to ensure compliance with the regulations.

3.6.5 NOTOC (Notification to Captain) – If applicable

This is the responsibility of the air operator or the appointed agent

3.6.6 Additional Information

When shipments are shipped under exemption, a copy of the exemption must accompany the consignment

Note: Dangerous Goods Transport Document as above must be retained a minimum of 3 months after finishing the transportation. These documents shall be made available upon request by the CAAT

3.7 Recognition of Undeclared / Hidden Dangerous Goods

3.7.1 General Description 'Hidden' Dangerous Goods

Shippers and freight forwarders intending to offer general cargo by air transport may declare its goods under one or more general descriptions (e.g., chemicals, electrical equipment, ship spares etc.) instead of providing a breakdown or itemised list of items to accurately describe the nature of goods. The following table identifies the potential hidden dangerous goods that may be present within such general description of goods. The following is a list of general descriptions that are often used for items in cargo or in passengers' baggage and the types of dangerous goods that may be included in any item bearing that description.

General Description of Goods	Potential Hidden Dangerous Goods within such General Descriptions
Aircraft Spare Parts/ Aircraft Equipment/ Aircraft on Ground (AOG) Spares	May contain items meeting any of the criteria for dangerous goods. For example, explosives (flares or fire bottle cartridges), chemical oxygen generators, cylinders of compressed gas (such as oxygen, carbon dioxide, nitrogen or fire extinguishers), paint, adhesives, aerosols, life-saving appliances (life jackets, escape slides), fuel in equipment, first aid kits, wet or lithium batteries, matches, fire extinguishers, etc.
Automobile Parts/Supplies (car, car parts, motor, motorcycle)	May contain ferro-magnetic material which may not meet the definition for magnetized material but which may be subject to special stowage requirements due to the possibility of affecting aircraft instruments (DGR 3.9.2.2). May also contain engines, including fuel cell engines, carburettors or fuel tanks which contain or have contained fuel, wet or lithium batteries, compressed gases in tyre inflation devices, fire extinguishers, shocks/struts with nitrogen, air bag inflators/air bag modules, flammable adhesives, paints, sealants and solvents, etc.
Battery-powered devices/Equipment	May contain wet or lithium batteries.
Breathing Apparatus	May indicate cylinders of compressed air or oxygen, chemical oxygen generators or refrigerated liquefied oxygen.

General Description of Goods	Potential Hidden Dangerous Goods within such General Descriptions
Camping/Expeditionary Equipment	May contain flammable gases (butane, propane, etc.), flammable liquids (kerosene, gasoline, etc.), flammable solids (hexamine, matches, etc.) or other dangerous goods.
Chemicals	Most chemicals are dangerous and only qualified dangerous goods acceptance staff can advise if it is acceptable as cargo. Dangerous chemicals must never be accepted as baggage.
COMAT (Company Materials)	Such as aircraft parts may contain dangerous goods as an integral part, e.g. chemical oxygen generators in a passenger service unit (PSU), compressed gas, flammable liquid, corrosive material, magnetized material, etc.
Consolidated Consignments (Groupages)	May contains any of the defined classes of dangerous goods.
Cryogenic (Liquid)	Indicates refrigerated liquefied gases such as nitrogen, neon, helium, argon, etc. Cryogenic liquids are dangerous because they might destroy human skin tissue on contact, and when spilled, they could cause suffocation in confined spaces.
Cylinders	Indicates compressed or liquefied gases.
Dental Apparatus	May contain flammable resins or solvents, compressed or liquefied gas, mercury and radioactive material.
Diagnostic Specimens	May contain infectious substances.
Diving Equipment	May include air cylinders (such as scuba tanks, vest bottles, etc.) which usually contain compressed air or a special gas mixture. Emptied cylinders (pressure gauge reads zero) are acceptable. Diving lamps may contain rechargeable lead acid batteries and high intensity diving lamps can generate extremely high heat when operated in air. In order to be carried safely, the bulb or battery must be disconnected.

General Description of Goods	Potential Hidden Dangerous Goods within such General Descriptions
Drilling or Mining Equipment	May contain explosives and/or other dangerous goods.
Dry Shipper (Vapour Shipper)	May contain free liquid nitrogen. Dry shippers are subject to the Regulations when they permit the release of any free liquid nitrogen irrespective of the orientation of the package.
Electrical Equipment/ Electronic Equipment	May contain magnetized materials or mercury in switch gear and electron tubes, wet batteries, lithium batteries or fuel cells or fuel cell cartridges that contain or have contained fuel.
Electrically Powered Apparatus (wheelchairs, mobility aids, lawn mowers, golf carts, etc.)	May contain wet batteries, lithium batteries or fuel cells or fuel cell cartridges that contain or have contained fuel.
Expeditionary Equipment	May contain explosives (flares), flammable liquids (gasoline), flammable gas (propane, camping gas) or other dangerous goods.
Film Crew or Media Equipment	May include explosive pyrotechnic devices, generators incorporating internal combustion engines, batteries, lithium batteries, fuel, heat producing items, etc.
Frozen Embryos	May contain refrigerated liquefied gas or Carbon dioxide, solid (dry ice).
Frozen fruit, vegetables, etc	May be packed in Carbon dioxide, solid (dry ice), which can adversely affect live animals and humans.
Fuels	May contain flammable liquids, flammable solids or flammable gases.
Fuel Control Unit	May contain flammable liquids.
Hot Air Balloon	May contain cylinders with flammable gas, fire extinguishers, batteries, etc.

General Description of Goods	Potential Hidden Dangerous Goods within such General Descriptions
Household Goods	May contain items meeting any of the criteria for dangerous goods including flammable liquids such as solvent based paint, adhesives, polishes, aerosols (for passengers, those not permitted under DGR 2.3), bleach, corrosive oven or drain cleaners, ammunition, matches, etc.
Instruments	May conceal barometers, manometers, mercury switches, rectifier tubes, thermometers, etc. containing mercury.
Laboratory/Testing Equipment	May contain items meeting any of the criteria for dangerous goods, particularly flammable liquids, flammable solids, oxidizers, organic peroxides, toxic or corrosive substances.
Machinery Parts	May contain adhesives, paints, sealants, solvents, wet and lithium batteries, mercury, cylinders of compressed or liquefied gas, etc.
Magnets and other items of similar material	May individually or cumulatively meet the definition of magnetized material.
Medical Supplies/ Equipment	May include items meeting any of the criteria for dangerous goods, particularly flammable liquids, flammable solids, oxidizers, organic peroxides, toxic or corrosive substances.
Metal Construction Material/Metal Piping/Metal Fencing	May contain ferro-magnetic material, which may be subject to special stowage requirements due to the possibility of affecting aircraft instruments DGR 3.9.2.2.
Passenger Baggage	May contain items meeting any of the criteria for dangerous goods. Examples include fireworks, flammable household liquids, corrosive oven or drain cleaners, flammable gas or liquid lighter refills or camping stove cylinders, matches, ammunition, bleach, aerosols (those not permitted under DGR 2.3), etc.
Pharmaceuticals	May contain items meeting any of the criteria for dangerous goods, particularly radioactive material, flammable liquids,

General Description of Goods	Potential Hidden Dangerous Goods within such General Descriptions
	flammable solids, oxidizers, organic peroxides, toxic or corrosive substances.
Photographic Supplies/Equipment	May contain items meeting any of the criteria for dangerous goods, particularly heat producing devices, flammable liquids, flammable solids, oxidizers, organic peroxides, toxic or corrosive substances.
Promotional Material	May contain items meeting any of the criteria for dangerous goods.
Racing Car or Motorcycle Team Equipment	May contain engines, including fuel cell engines, carburettors or fuel tanks which contain fuel or residual fuel, flammable aerosols, cylinders of compressed gases, nitromethane, other fuel additives, wet batteries, lithium batteries, etc.
Refrigerators	May contain liquefied gases or an ammonia solution.
Repair Kits	May contain flammable adhesives, solvent-based paints, organic peroxides, resins, etc.
Samples for Testing	May contain items meeting any of the criteria for dangerous goods, particularly infectious substances, flammable liquids, flammable solids, oxidizers, organic peroxides, toxic or corrosive substances.
Semen	May be packed with Carbon dioxide, solid (dry ice) or refrigerated liquefied gas. See also “Dry Shipper”.
Ships' Spares	May contain explosives (flares), cylinders of compressed gas (life rafts), paint, lithium batteries (emergency locator transmitters) etc.
Show, Motion Picture, Stage Special Effects Equipment	May contain flammable substances, explosives or other dangerous goods.

General Description of Goods	Potential Hidden Dangerous Goods within such General Descriptions
Sporting Goods/ Sports Team Equipment	May contain cylinders of compressed or liquefied gas (air, carbon dioxide, etc.), lithium batteries, propane torches, first aid kits, flammable adhesives, aerosols, etc.
Swimming Pool Chemicals	May contain oxidising or corrosive substances.
Switches in Electrical Equipment	May contain mercury.
Toolboxes	May contain explosives (power rivets), compressed gases or aerosols, flammable gases (butane cylinders or torches), flammable adhesives or paints, corrosive liquids, lithium batteries, etc.
Torches	Micro torches and utility lighters may contain flammable gas and be equipped with an electronic starter. Larger torches may consist of a torch head (often with a self-igniting switch) attached to a cylinder of flammable gas.
Unaccompanied Passenger Baggage/ Personal Effects	May contain items meeting any of the criteria for dangerous goods, such as fireworks, flammable household liquids, corrosive oven or drain cleaners, flammable gas or liquid lighter refills or camping stove cylinders, matches, bleach, aerosols, etc. (those not permitted under DGR 2.3).
Vaccines	May be packed with Carbon dioxide, solid dry ice.

3.8 Globally Harmonized System (GHS) Labelling

Some everyday household items bear consumer warning labels which may or may not indicate they are classified as dangerous goods in air transport. All over the world there are different laws on how to identify the hazardous properties of chemicals (called 'classification') and how information about these hazards is then passed to users (through consumer supply labels and safety data sheets for workers). This can be confusing because the same chemical can have different hazard descriptions in different countries.

For example, a chemical could be labelled for supply as 'toxic' in one country, but not in another. For this reason, the UN brought together experts from different countries to create the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Products bearing the following GHS labels may indicate as dangerous goods:

Note - A product bearing the GHS corrosive label (depicted for right above) is NOT classified as dangerous goods if the signal word 'Danger' and hazard statement 'causes serious eye damage' applies. Products bearing the following GHS labels (and none of the above) are NOT classified as dangerous goods**.**

Table GHS Pictograms and their Criteria

Pictogram							
Name	Explosive	Gases Under Pressure	Flammable	Oxidizer	Toxic	Corrosive	Aquatic Toxicity
Appears on	Explosives		Gases Aerosols Liquids Solids	Oxidizing Gases Oxidizing Liquids Oxidizing Solids	Acute Toxicity Skin Oral Inhalation	Corrosive to Metal Skin Corrosion Serious Eye Damage	Acute Chronic
	Self-Reactive Substances and Mixtures		Self-Reactive Substances and Mixtures Pyrophoric Liquids and Solids				
	Organic Peroxides		Self-Heating Substances and Mixtures				
			Substances and Mixtures, Which in Contact With Water, Emit Flammable Gases				
			Organic Peroxides				

Notes:

The GHS pictograms, as shown above may indicate products which are dangerous goods for transport. There are, however national and regional differences which may mean that packages bearing such pictograms are not classified as dangerous goods in transport.

When a substance is required to show corrosive symbol based solely on classification criteria of “serious eye damage” in the GHS classification, the substance does not meet the classification criteria of corrosive materials for transport.

Pictogram		

Name	Harmful	Respiratory
Appear on	Harmful to Skin Oral Inhalation	Respiratory Sensitization Carcinogenicity Toxic to Reproduction
	Skin Irritation Eye Irritation	specific Target Organ Systemic Toxicity Single Exposure
	Respiratory Tract Irritation Narcotic Effects	Specific Target Organic Systemic Toxicity Repeated Exposure
	Skin Sensitization	Aspiration Hazard Germ Cell Mutagenicity

3.9 Preparing Dangerous Goods Shipment

Before any package or overpack of dangerous goods is offered for air transport, the shipper must comply with the following specific responsibilities

3.9.1 Classification

Company name (Pty) Ltd is responsible for identifying and classifying all dangerous goods intended for transport by air in compliance with IATA DGR. Specifically, before packing any dangerous goods for transport by air, the shipper must:

a) identify, correctly and fully, all articles and substances that meet the criteria as dangerous goods within the consignment.
b) classify each item of dangerous goods by determining which of the nine classes it falls and where relevant, determining any subsidiary hazards.
c) where relevant, assign each item of dangerous goods to one of the three packing groups within the assigned class or division.

3.9.2 Identification

Dangerous goods must be assigned to one of the proper shipping names and UN number shown in the List of Dangerous Goods. Such substances may contain technical impurities (for example those deriving from the production process) or additives for stability or other purposes that do not affect their classification. However, a substance listed by name containing technical impurities or additives for stability or other purposes affecting its classification must be considered a mixture or solution. The proper shipping name is used to identify the dangerous article or substance on the outside of the package and on the “Shipper's Declaration for Dangerous Goods”.

3.9.3 Packing

Company name (Pty) Ltd is responsible for all aspects of the packing of dangerous goods in compliance with IATA DGR. When preparing each package of dangerous goods, *Company name (Pty) Ltd* must:

a) comply with the set of packing requirements appropriate to the type of packaging to be used;
b) use only the packagings permitted by the applicable packing instruction specified in Columns G, I and K of the List of Dangerous Goods;
c) for all packagings, restrict the overall quantity per package to the limits specified in Columns H, J or L of the List of Dangerous Goods (as applicable) or to the design limit for

the package whichever is more restrictive. In addition, for combination packaging, the quantity limit per inner packaging must not exceed the limits specified in the applicable packing instruction;

d) assemble and secure all components of the packaging exactly in the manner intended;
e) ensure that external surfaces of assembled package(s) are clean of contamination arising from the filling process itself or from contamination from the environment surrounding the filling/assembly area; and
f) ensure that their responsibilities for packing are completely fulfilled when the package is presented to the operator for shipment.

3.9.4 Marking

For each package and overpack requiring one or more marks, ***Company name (Pty) Ltd*** must:

a) check that any relevant mark on the package or overpack already on the package is in the correct location and meets the quality and specification requirements of IATA DGR;
b) remove or obliterate any irrelevant mark already on the package or overpack;
c) ensure that each outer or single packaging used for dangerous goods, for which specification packaging is required, bears the specification marks as specified in IATA DGR;
d) apply any appropriate new mark in the correct location and ensure that it is of durable quality and correct specification;
e) ensure that their responsibilities for marking are completely fulfilled when the package or overpack is presented to the operator for shipment.

3.9.5 Labeling

For each such package and overpack requiring labelling, ***Company name (Pty) Ltd*** must:

a) remove or obliterate any irrelevant labelling already on the package or overpack;
b) use only labels of durable quality and correct specification;
c) inscribe on each label, in a durable manner, any required additional information;
d) affix the appropriate label(s) in the correct location(s) and in a secure manner;
e) ensure that the responsibilities for labelling are completely fulfilled when the package or overpack is presented to the operator for shipment.
f)

3.9.6 Documentation

The shipper is responsible for providing information applicable to a consignment of dangerous goods to the operator as set out in IATA DGR. The information may be provided on a prescribed

declaration form “Shipper's Declaration for Dangerous Goods” or, where an agreement exists with the operator, for each and every shipment containing dangerous goods so defined or classified in these Regulations unless it is stated that a Shipper's Declaration is not required. For each shipment containing dangerous goods ***Company name (Pty) Ltd*** must:

a) use only the correct form in the correct manner;
b) ensure that the information on the form is accurate, easy to identify, legible and durable;
c) ensure that the form is properly signed when the shipment is presented to the operator for shipment; and
d) ensure that the shipment has been prepared in accordance with IATA DGR.

3.10 Receiving Dangerous Goods Shipment from Shipper/Freight Forwarder

3.10.1 A dangerous goods consignment which is prepared by shipper/freight forwarder will only be received by ***Company name (Pty)***Ltd under the following conditions:

a) ***Company name (Pty) Ltd*** only trained Staff and or third-party staff that is trained on, which they are responsible prior to performing their duties.
b) The goods are properly packaged with no evidence of leaking, tampering
c) Proper documentation is available. That is, the Air waybill 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

3.10.2 If the goods have been identified with the following:

a) UN Number (United Nations Number)
b) Class Division or Number
c) Packing Group

3.10.3 The following is also critical:

a) Number and Type of Packages
b) Packing Instruction
c) Any Exemption, approval and Special Provision (if applicable)

3.10.4 The properly dangerous goods package and completed dangerous goods transport document which be inspected by ***Company name (Pty) Ltd*** will be offer to air operator or ground handling to transport

3.11 Transportation to Airport

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

3.12 Dangerous Goods Acceptance for Transport

3.12.1 *Company name (Pty)Ltd* provides notices giving information about the transport of dangerous goods are sufficient in number, prominently displayed notices giving information about the transport of dangerous goods are sufficient in number, prominently displayed at a visible location(s) at the cargo acceptance points to alert shippers/freight forwarder about any dangerous goods that may be contained in their cargo consignment(s). These notices must include visual examples of dangerous goods, including batteries.

3.12.2 Acceptance staff must be adequately trained to assist them to identify and detect dangerous goods present as general cargo. Information about:

a) acceptance staff must be adequately trained to assist them to identify and detect dangerous goods present as general cargo. Information about:

b) other indication that dangerous goods may be present (e.g. labels, marks), must be provided to cargo acceptance staff and must be readily available to such staff.

3.12.3 Cargo Acceptance staff should seek confirmation from shippers about the contents of any item of cargo where there are suspicions that it may contain dangerous goods, with the aim of preventing undeclared dangerous goods from being loaded on an aircraft as general cargo. Many ordinary looking items may contain dangerous goods and a list of some general descriptions which, experience has shown, are often applied to such items is found in the list of hidden dangerous goods.

3.12.4 Before a consignment consisting of a package or overpack containing dangerous goods, a freight container containing radioactive material or a unit load device containing dangerous goods is first accepted for carriage by air, Dangerous Goods Acceptance personnel shall use of a checklist, verify the following:

a) Verify all documentation (i.e. Shipper’s Declaration, Air Waybill etc.).

b) Verify the Dangerous Goods against accompanying documentation.

c) Verify the quantity of dangerous goods stated on the Shipper's Declaration is within the limits per package on a passenger or cargo aircraft as appropriate

d) Verify the marks on package(s), overpack(s) or freight container(s) accord with the details stated on the accompanying Shipper's Declaration and are clearly visible

e) Verify the letter in the packaging specification mark designating the packing group for which the design type has been successfully tested is appropriate for the dangerous goods contained within. This does not apply to overpacks where the specification marks are not visible

f) Verify proper shipping names, UN numbers, labels and special handling instructions appearing on the interior package(s) are clearly visible or reproduced on the outside of an overpack

g) Verify the labelling of the package(s), overpack(s) or freight container(s) is as required

h) Verify the outer packaging of a combination packaging or the single packaging is permitted by the applicable packing instruction and when visible is of the type stated on the accompanying Shipper's Declaration

i) Verify the package or overpack does not contain different dangerous goods which require segregation according to segregation chart

j) Verify the package, overpack, freight container or unit load device is not leaking and there is no indication that its integrity has been compromised

k) Ensure that the Consignor supplies a complete description of the contents of the goods.

l) Check consignments for signs of tampering.

m) Sign the declaration and make necessary endorsements on such documentation if applicable.

n) 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.

o) Verify the sign of undeclared or hidden dangerous goods including dangerous goods which not required Shipper’s Declaration.

p) Should any irregular behavior or activity by the driver or person tendering Dangerous Goods be observed take appropriate action

q) 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.

3.12.4 Where a Shipper's Declaration is provided, one copy of the declaration form must accompany the consignment to final destination and one copy must be retained by the operator at a location on the ground where it will be possible to obtain access to it within a reasonable period; the declaration form must be retained at this point until the goods have arrived at final destination, after which time it may be stored elsewhere.

3.12.5 Where a dangerous goods consignment fails the acceptance check due to an error or omission by the shipper in packaging, labelling, marking or documentation, the rejection record remains on file for a minimum period of three months a copy of the Shipper's Declaration and the acceptance checklist.

3.13 Verification of the List of Dangerous Goods Operating License or Registration Certificate of Dangerous Goods Operator

During the acceptance of Dangerous Goods acceptance Staff shall verify Dangerous Goods Operating License or Registration Certificate of Dangerous Goods Operator issued by CAAT has current list as to establish if the cargo is tendered by and approved Dangerous Goods Operating License and Registration Certificate for Dangerous Goods Operator.
In cases where the shipper or freight forwarder is not listed as an authorized holder of a Dangerous Goods Operating License or Registration Certificate of Dangerous Goods Operator, the shipment will be refused acceptance.

3.14 Random and Unpredictable Security Controls

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

a) Physical opening and verification of the contents of against accompanying documentation.
b) A phone call to the shipper to confirm if the shipper is the originator of the goods and to confirm the contents.

3.15 Examining and completing dangerous goods transport documents

The completion and dangerous goods transport document 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

3.16 Dangerous Goods Audit Trail

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

a) Consignee and Consignor detail
b) Description of the goods
c) Security controls applied to such consignments
d) Whether the consignment was accepted or declined

Note: Records shall be maintained for a period of not less than three months.

3.17 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. CAAT and other relevant local authorities shall be notified. All incidents and accidents shall be recorded and kept on file.

3.18 Risk/Vulnerability Assessments

Frequency of vulnerability assessments: Bi-annually or when an incident occurred requiring the re-assessment of security measures and systems.
The Dangerous Goods Coordinator or authorized representative will conduct vulnerability assessments.

3.19 Storage of Dangerous Goods

3.19.1 *Company name (Pty)Ltd* will have designated areas which have the following:

a) Fire extinguishers
b) Emergency Response Spill Kits to store all Dangerous Goods
c) Display of Compatibility Chart/Segregation table
d) Display of Dangerous Goods signage with classes

3.19.2 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

3.19.3 Only trained Staff is to handle the storage in the branch

3.19.4 Packages containing dangerous goods, which might react dangerously with each other, must not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage. To maintain acceptable segregation between packages containing dangerous goods having different hazards, the segregation requirements shown in Compatibility Chart in the Appendix D must be observed. The segregation requirements apply based on all hazard labels applied on the package, irrespective of whether the hazard is the primary or subsidiary hazard

3.20 Loading of Dangerous Goods

3.20.1 Loading Restrictions on Flight Deck and for Passenger Aircraft

Dangerous goods must not be carried in an aircraft cabin occupied by passengers or on the flight deck of an aircraft, except as permitted by IATA DGR 2.3.2 to 2.3.5 and 2.5.1 and for excepted packages of radioactive materials. Dangerous goods may be carried in a main deck cargo compartment of a passenger aircraft provided that the compartment meets all the certification requirements for a Class B or Class C aircraft cargo compartment. Dangerous goods bearing the "Cargo Aircraft Only" label must not be carried on a passenger aircraft.

3.20.2 Segregation of Dangerous Goods

a) Packages containing dangerous goods, which might react dangerously with each other, must not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage. To maintain acceptable segregation between packages containing dangerous goods having different hazards, the segregation requirements shown in Appendix D must be observed. The segregation requirements apply based on all hazard labels applied on the package, irrespective of whether the hazard is the primary or subsidiary hazard.

b) Packages containing dangerous goods with multiple hazards where the class or division of the primary and subsidiary hazards require segregation in accordance with Appendix D need not be segregated from other packages bearing the same UN number

c) Packages and overpacks containing UN 3480 - lithium ion batteries prepared in accordance with Section IA or Section IB of PI 965 and packages and overpacks containing UN 3090 - lithium metal batteries prepared in accordance with Section IA or Section IB of PI 968 must not be stowed on an aircraft next to, or in a position that would allow interaction in the event of damage/fire with packages or overpacks containing dangerous goods which bear a Class 1, other than Division 1.4S, Division 2.1, Class 3, Division 4.1 or Division 5.1 hazard label. To maintain acceptable segregation between packages and overpacks, the segregation requirements shown in Table 9.3.A must be observed. The segregation requirements apply based on all hazard labels applied on the package or overpack, irrespective of whether the hazard is the primary or subsidiary hazard.

d) UN 3528, Engines, internal combustion, flammable liquid powered, Engines, fuel cell, flammable liquid powered, Machinery internal combustion, flammable liquid powered and

Machinery, fuel cell, flammable liquid powered need not be segregated from packages containing dangerous goods in Division 5.1.

3.20.3 Handling and Loading of Packages Containing Liquid Dangerous Goods

During the course of transport, packages bearing the package orientation “This Way Up” label must be loaded, stowed and handled at all times in accordance with such a label. Single packagings with end closures, containing liquid dangerous goods must be loaded and stowed aboard an aircraft with such closures upwards, notwithstanding that such single packagings may also have side closures.

3.20.4 Cargo Aircraft Loading

Packages or overpacks of dangerous goods bearing the “Cargo Aircraft Only” label must be loaded for carriage by a cargo aircraft in accordance with one of the following provisions:

a) in a Class C aircraft cargo compartment; or

b) in a unit load device equipped with a fire detection/suppression system equivalent to that required by the certification requirements of a Class C aircraft cargo compartment as determined by the appropriate national authority (a ULD that is determined by the appropriate national authority to meet the Class C aircraft cargo compartment standards must include “Class C compartment” on the ULD tag); or

c) in such a manner that in the event of an emergency involving such packages or overpacks, a crew member or other authorized person can access those packages or overpacks and can handle and where size and weight permit, separate such packages from other cargo.

d) external carriage by helicopter; or

e) with the approval of the State of the operator, for helicopter operations, in the cabin (see Supplement to the ICAO Technical Instructions (Doc 9284 AN/905 Supplement), Part S-7;2.4)

3.20.5 The requirements of 30.21.4 a), b) and c) do not apply to:

a) UN 3529, Engine, internal combustion, flammable gas powered or Engine, fuel cell, flammable gas powered or Machinery, internal combustion, flammable gas powered or Machinery, fuel cell, flammable gas powered;

b) flammable liquids (Class 3), Packing Group III, other than those with a subsidiary hazard of Class 8 or UN 3528, Engine, internal combustion, flammable liquid powered or Engine, fuel cell, flammable liquid powered or Machinery, internal combustion, flammable liquid powered or Machinery, fuel cell, flammable liquid powered;

c) toxic substances (Division 6.1) with no subsidiary hazard other than Class 3;

d) infectious substances (Division 6.2);

e) radioactive materials (Class 7);

f) miscellaneous dangerous goods (Class 9).

3.20.6 Securing Requirements

When dangerous goods subject to the requirements herein are loaded in an aircraft, the operator must protect the packages of dangerous goods from being damaged, including by the movement of baggage, mail, stores or other cargo. Particular attention must be paid to the handling of packages during their preparation for transport, the type of aircraft on which they are to be carried and the method required to load that aircraft, so that accidental damage is not caused through dragging or mishandling of the packages.

3.20.7 Identification of Unit Load Devices Containing Dangerous Goods

3.20.7.1 Each unit load device containing dangerous goods, which require a hazard label, must display an identification tag on its exterior indicating that dangerous goods are contained within the unit load device

3.20.7.2 The identification tag must:

a) have a border of prominent red hatchings on both sides and be visible at all times;
b) have minimum dimensions of 148 mm × 210 mm; and
c) be legibly marked with the primary and subsidiary hazard class(es) or division(s) numbers of such dangerous goods.

3.20.7.3 The identification tag must be removed from the unit load device immediately after the dangerous goods have been unloaded.

3.20.7.4 When placed inside a protective tag holder, the information on the identification tag must be legible and visible.

3.20.7.5 If the unit load device contains packages bearing the "Cargo Aircraft Only" label, the identification tag must indicate that the unit load device can only be loaded on a cargo aircraft.

3.20.8 Loading of Magnetized Materials

Magnetized materials must be loaded so that headings of aircraft compasses are maintained within the tolerances prescribed by the applicable aircraft airworthiness requirements and where practical, in locations minimizing possible effects on compasses. Multiple packages may produce a cumulative effect. For magnetized material transported under the conditions of an approval described in Packing Instruction 953, loading must be in accordance with conditions specified in the authorizing approval.

3.20.9 Loading of Carbon Dioxide, Solid (Dry Ice)

Carbon dioxide, solid (dry ice) shipped by itself or used as a refrigerant for other commodities, may be carried provided that the operator has made suitable arrangements dependent on the aircraft type, the aircraft ventilation rates, the method of packing and stowing, whether or not animals will be carried on the same flight and other factors. The operator must ensure that ground staff are informed that Carbon dioxide, solid (dry ice) is being loaded or is on board the aircraft.

Where dry ice is contained in a unit load device prepared by a single shipper in accordance with Packing Instruction 954 and the operator after acceptance adds additional dry ice then the operator must ensure that the information provided to the pilot-in-command reflects that revised quantity of dry ice.

3.20.10 Loading of Radioactive Materials

Category II-Yellow and Category III-Yellow packages, overpacks or freight containers must be separated from persons. The minimum separation distances to be applied are shown in Tables 10.9.C and 10.9.D. These distances are measured from the surface of the packages, overpacks or freight containers to the nearest inside surface of the passenger cabin or flight deck partitions or floors, irrespective of the duration of the carriage of the radioactive material. Table 10.9.D applies only when radioactive material is being carried by cargo aircraft and in those circumstances, the minimum distances must be applied as above and also to any other areas occupied by persons.

3.20.11 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 or is leaking - the Shipper must be notified immediately to come and collect the package for proper packaging.
c) Should a package be damaged or leaked whilst in the care of *Company name (Pty)Ltd* the following needs to be done:
    1) Avoid handling the package
    2) Inspect adjacent packages for contamination and put aside any that have been contaminated
    3) Do not clean the area
    4) Report to the supervisor who should in turn report to the Dangerous Goods Coordinator.

3.21 Information to the Pilot-in-Command

3.21.1 General

As early as practicable prior to departure of the aircraft, but in no case later than when the aircraft moves under its own power, the operator of an aircraft in which dangerous goods are to be carried must:

a) provide the pilot-in-command with accurate and legible written or printed information concerning dangerous goods that are to be carried as cargo; and
b) provide personnel with responsibilities for operational control of the aircraft (e.g. the flight operations officer, flight dispatcher, or designated ground personnel responsible for flight operations) with the same information that is required to be provided to the pilot-

in-command (e.g. a copy of the written information provided to the pilot-in-command). Each operator must specify the personnel (job title or function) to be provided this information in their operations manual and/or other appropriate manuals.

The written information to the pilot-in-command must include the following:

1) the date of the flight;
2) the Air Waybill number (when issued);
3) the proper shipping name (the technical, chemical group name(s) shown on the Shipper's Declaration is not required) and UN number or ID number as listed in these Regulations. When chemical oxygen generators contained in Protective Breathing Equipment (PBE) are being transported under Special Provision A144, the proper shipping name of “Oxygen generator, chemical” must be supplemented with the statement “Air crew Protective Breathing Equipment (smoke hood) in accordance with Special Provision A144”;
4) the class or division and subsidiary hazard(s) corresponding to label(s) applied, by numerals and in the case of Class 1, the compatibility group;
5) the Packing Group as shown on the Shipper's Declaration;
6) for non-radioactive material) the number of packages, the net quantity, or gross weight if applicable, including the units of measurement, of each package, except that this does not apply to dangerous goods where the net quantity or gross weight is not required on the Shipper's Declaration for Dangerous Goods (see IATA DGR 8.1.6.9.2, Step 6), or, when applicable, alternative written documentation and their exact loading location.
7) for a consignment consisting of multiple packages containing dangerous goods bearing the same proper shipping name and UN number or ID number, only the total quantity and an indication of the largest and smallest package at each loading location need to be provided. For consumer commodities, the information provided may be either the gross weight of each package or the average gross weight of the packages as shown on the Shipper's Declaration;
8) the number of overpacks and an indication of which dangerous goods packages are contained in each overpack;
9) the number of all packed in one packages and an indication of which dangerous goods are contained in the package(s).

10) (for radioactive material) the number of packages, overpacks, or freight containers, their category, their transport index, if applicable and their exact loading location;
11) whether the package must be carried on cargo aircraft only;
12) the airport at which the package(s) is to be unloaded; and
13) (where applicable) an indication that the dangerous goods are being carried under a state exemption.
14) the telephone number where a copy of the information provided to the pilot-in-command can be obtained during the flight if the operator allows the pilot-in-command to provide a telephone number instead of the details about the dangerous goods on board the aircraft.

3.21.2 Procedure of Information to Pilot-In-Command

a) The information to the pilot-in-command must also include signed confirmation, or some other indication, from the person responsible for loading the aircraft, that there was no evidence of any damage to or leakage from the packages or any leakage from the unit load devices loaded on the aircraft.

b) The information to the pilot-in-command must be readily available to the pilot-in-command during flight.

c) A legible copy of the information to the pilot-in-command must be retained on the ground. This copy must have an indication on it or with it that the pilot-in-command has received the information. A copy, or the information contained in the notice to the pilot-in-command, must be readily accessible to the flight operations officer, flight dispatcher, or designated ground personnel responsible for flight operations until after the arrival of the flight.

3.22 Retention of Document

The following dangerous goods transport documents will be maintained for a period not less than three months:

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

3.23 Emergency Response Information

The *Company name (Pty)Ltd* must ensure that for consignments requiring a Shipper's Declaration for Dangerous Goods, appropriate information is immediately available at all times for use in emergency response to accidents and incidents involving dangerous goods in air transport. The information must be available to the staff and can be provided by any document, which provides appropriate handling information concerning dangerous goods.

The Shipper and Freight Forwarder must provide 24-hour emergency contact in Additional Handling Information of Shipper's Declaration for Dangerous Goods

The 24-hour emergency contact of *Company name (Pty)Ltd* is

Name:

Phone:

E-mail:

3.24 Removal Contamination

If an operator becomes aware that baggage or cargo not identified as containing dangerous goods has been contaminated and it is suspected that dangerous goods may be the cause of the contamination, the operator must take reasonable steps to identify the nature and source of contamination before proceeding with the loading of the contaminated baggage or cargo. If the contaminating substance is found or suspected to be a substance classified as dangerous goods by these Regulations, the operator must isolate the baggage or cargo and take appropriate steps to nullify any identified hazard before being transported further by air.

3.25 Dangerous Goods Reporting Requirements

Dangerous goods occurrences meeting the criteria of The Civil Aviation Authority of Thailand requirement no. 22/2562 on "Reporting of Civil Aviation Occurrence" also meet the definition of a dangerous goods accident or incident (above), reportable in accordance with The Civil Aviation Authority of Thailand requirement no. 22/2562 on "Reporting of Civil Aviation Occurrence " Accordingly, the report must be reported to CAAT within 72 hours.

3.25.1 Reporting of Damaged and Leaking Dangerous Goods

Inform the Manager on duty who will arrange for a chemical cleaning organization to collect and dispose

a) Notify the Shipper and or the Consignee
b) Notify authorities (airport, CAAT, the operator)
c) If the package contains infectious substances, notify Health authorities as well
d) If personnel were in contact with the contents of the package, the following must be done:
    1) Thoroughly wash off the body with plenty of water immediately.
    2) Remove contaminated clothing.
    3) Do not eat or smoke.
    4) Keep hands away from eyes, mouth and nose.
    5) Seek medical assistance

3.25.2 Undeclared or Mis-declared Dangerous Goods

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 CAAT.

Should you come across an undeclared or mis-declared Dangerous Goods, inform the Manager who will in turn inform the Designated Dangerous Goods Coordinator / Manager who will in turn inform the CAAT.

3.25.3 Dangerous Goods Accident and Incident Reporting

The organization must report dangerous goods accidents and incidents to the CAAT in accordance with criteria of The Civil Aviation Authority of Thailand requirement no. 22/2562 on "Reporting of Civil Aviation Occurrence" without delay.

3.25.4 Reporting of Dangerous Goods Occurrences

An organization must report to CAAT any occasion when:

a) dangerous goods are discovered to have been carried when not loaded, segregated, separated or secured; or
b) dangerous goods are discovered to have been carried without information having been provided to the Pilot-in-Command.

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4. Dangerous Goods Security

The security person responsible for *Company name (Pty)Ltd* engaged in the transport of high consequence dangerous goods adopt, implement and comply with a security plan that addresses the specified elements

Name:

Title:

ID Number:

Phone:

E-mail:

4.1. Prohibited Articles

The following shall be considered as prohibited articles:

a) Assembled explosive and incendiary devices that are not carried in accordance with the applicable safety rules.
b) Live Intentionally Infected Animals or suspected to contain infectious substances.

4.2. 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 organization. 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, if the incident occurs within the aerodrome area.

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.

4.3. Premises, staff and access control and control of permits

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

4.3.2 This will include the following:

a) All shipping and receiving doors shall be closed and locked or guarded when not in use

b) 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

c) Access to Dangerous Goods areas shall be restricted to authorized persons with an operational need

d) 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.

e) Each access control point shall be staffed, effectively monitored or secured.

f) The outer perimeter shall be clearly defined through physical barriers.

g) The inner perimeter shall be clearly defined through physical barriers.

h) Staff authorized to have unescorted access to controlled areas shall be issued with passes/permits.

i) Visitors shall at all times be escorted if required to enter controlled areas within the cargo facility.

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

4.4. Unauthorized Access

4.4.1 Where an unauthorized 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.

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

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

a) The person should be challenged. If it is regarded as not safe, the assistance of the security department and or police must be sought.

b) The identity of the person should be established.

c) The area where Dangerous Goods are kept that is intended for carriage by air shall be regarded as contaminated/unsecured.

d) 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.

4.5. 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 normally as possible in case of a power outage.

4.6. 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 authorized personnel only.

4.7. Personnel Records

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

These documents shall be made available upon request by the CAAT

5. Dangerous Goods Training

5.1. General

All organization shall establish and maintain initial and recurrent dangerous goods training program to be submitted to the Director General for approval under RCAAT no. 73 Chapter 5.

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

Note: Shippers / Freight Forwarders, they shall provide their employees training with one of the following;

5.2. Approval of Dangerous Goods Training Programmes

[*Company Name (Pty)*] - Insert company name hold approval for dangerous goods training programmes in the carriage of dangerous goods by air in accordance with CAAT requirement. 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 CAAT for the training approval to remain valid.

Editorial Note 1: Prior to outsourcing the provision of dangerous goods training, organization must establish that the proposed training materials are approved by the CAAT.
Note: All Dangerous Goods training program shall be approved by CAAT before being implemented.

5.3. 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, The employer of personnel that perform functions aimed at ensuring that dangerous goods are transported in accordance, ICAO Doc 9284 must establish and maintain a dangerous goods training programme.
A training programme includes elements such as methodology initial and recurrent training and assessment, instructor qualifications and competencies, training and assessment records and

evaluation of its effectiveness. Operators need to determine the purpose and objective of the competency-based training programme based on the functions for which their personnel are responsible. Operator should ensure that training is designed and developed to establish clear links among the competencies to be achieved, the learning objectives, assessment methods, and course materials.

An approach to ensuring personnel is competent to perform any function for which they are responsible is provided in CAAT Guidance Material for Competency-based Approach to Dangerous Goods Training and Assessment (CAAT-GM-OPS-DGCBT).

5.4. Objective of Dangerous Goods Training

The operator must ensure that personnel are competent to perform any function for which they are responsible prior to performing any of these functions. This must be achieved through training and assessment commensurate with the functions for which they are responsible. Such training must include:

a) general familiarization training - Personnel must be trained to be familiar with the general provisions;
b) function-specific training - Personnel must be trained to perform competently any function for which they are responsible; and
c) safety training - Personnel must be trained on how to recognize the hazards presented by dangerous goods, on the safe handling of dangerous goods, and on emergency response procedures.

5.5. Recurrent Training

Personnel must receive recurrent training and assessment within 24 months of previous training and assessment to ensure that competency has been maintained. However, if recurrent training and assessment is completed within the final three months of validity of the previous training and assessment, the period of validity extends from the month on which the recurrent training and assessment was completed until 24 months from the expiry month of that previous training and assessment.

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

Editorial Note: Organizations with a policy to provide recurrent dangerous goods training and assessment at periods of less than 24 months should state that policy

5.6. Dangerous Goods Training Record

The Organizations must maintain a record of training and assessment for personnel.

The record of training and assessment must include:

a) the individual's name and surname:
b) the month of completion of the most recent training and assessment;
c) a description, copy or reference to training and assessment materials used to meet the training and assessment requirements;
d) the name and address of the organization providing the training and assessment; and
e) evidence which shows that the personnel have been assessed as competent.

Training and assessment records must be retained by the employer for a minimum period of 36 months from the most recent training and assessment completion month and must be made available upon request to personnel or the appropriate national authority.

5.7. Instructor Qualifications

Instructors of initial and recurrent dangerous goods training programmes must have

a) Having knowledge and comprehension of the Technical Instructions or IATA Dangerous Goods Regulations, including Thai regulations related the transport of dangerous goods by air,
b) Have the cabability to develop lesson plans, training materials, exercises, and training evaluation forms, Including having completed training in instructional techniques.
c) Instructors shall demonstrate or be assessed as competent in instruction and the function(s) that they will instruct prior to delivering such a dangerous goods training program.
d) Having experiences in the transport of dangerous goods or air cargo operations or other experiences related to filght operations for at least five (5) years

Note - Organizations must ensure that the instructor receives updates to the Regulations and training material on an annual basis with the issuance of each edition of the DGR or as the Regulations are modified. Instructors must receive and understand updates to dangerous goods information and be made familiar with those changes by training or other means on an annual basis or as the Regulations are modified.

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Appendix A: Record of Amendment

Details of amendments must be recorded below and amended pages inserted immediately on receipt and all removed pages destroyed.

Amendment no.	Date	Amendment Description	Amendment made by

Appendix B: Safety Data Sheet Explanation

Safety Data Sheets (formerly called Material Safety Data Sheets) communicate hazard information about chemical products.

Section 1 – Identification identifies the chemical on the SDS as well as the recommended uses. It also provides the essential contact information of the supplier.

Section 2 – Hazard(s) identification includes the hazards of the chemical and the appropriate warning information associated with those hazards.

Section 3 – Composition/information on ingredients identifies the ingredient(s) contained in the product indicated on the SDS, including impurities and stabilizing additives. This section includes information on substances, mixtures, and all chemicals where a trade secret is claimed.

Section 4 – First-aid measures describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical.

Section 5 – Fire-fighting measures lists recommendations for fighting a fire caused by the chemical, including suitable extinguishing techniques, equipment, and chemical hazards from fire.

Section 6 – Accidental release measures provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. It may also include recommendations distinguishing between responses for large and small spills where the spill volume has a significant impact on the hazard.

Section 7 – Handling and storage provides guidance on the safe handling practices and conditions for safe storage of chemicals, including incompatibilities.

Section 8 – Exposure controls/personal protection indicates the exposure limits, engineering controls, and personal protective equipment (PPE) measures that can be used to minimize worker exposure.

Section 9 – Physical and chemical properties identifies physical and chemical properties associated with the substance or mixture.

Section 10 – Stability and reactivity describes the reactivity hazards of the chemical and the chemical stability information. This section is broken into 3 parts: reactivity, chemical stability, and other.

Section 11 – Toxicological information identifies toxicological and health effects information or indicates that such data are not available. This includes routes of exposure, related symptoms, acute and chronic effects, and numerical measures of toxicity.

Section 12 – Ecological information provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment.

Section 13 – Disposal considerations provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices. To minimize exposure, this section should also refer the reader to Section 8 (Exposure Controls/Personal Protection) of the SDS.

Section 14 – Transport information includes guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail, or sea.

Section 15 – Regulatory information identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS.

Section 16 – Other information indicates when the SDS was prepared or when the last known revision was made. The SDS may also state where the changes have been made to the previous version. You may wish to contact the supplier for an explanation of the changes. Other useful information also may be included here.

Appendix C: Emergency Response Chart

Hazard Class / Division and Compatibility Group	Dangerous Goods Class	Hazard Description	Immediate Action Minimize 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	Explosives (safety)	Small fire hazard	
2.1 2.2 2.2	Flammable Gas Non-Flammable Gas Cryogenic Liquid	Ignites when leaking High pressure cylinder bursting Subcooling	Notify Fire Department Guard against fire Evacuate goods ventilate area Keep away minimum 25 m
2.3	Toxic Gas (acceptable on Cargo Aircraft only)	High pressure cylinder bursting and toxic inhalation	
3	Flammable Liquid	Gives off flammable vapor	Notify Fire Department Guard against fire
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	Do NOT use water under any circumstances
5.1 5.2	Oxidizer Organic Peroxide	Ignites combustibles on contact Reacts violently with other substances	Notify Fire Department Guard against fire Do NOT use water
6.1 6.2	Toxic Substance Infectious Substance	Harmful if swallowed, inhaled or in contact with skin Causes of disease in Humans and Animals	Isolate are obtain qualified assistance Do NOT touch Keep away minimum 25m
7 Cat I 7 Cat II/III	Radioactive – White Radioactive – Yellow	Radiation hazards and harmful to health	
8	Corrosive	Hazardous to skin and metal	Notify Fire Department Guard against fire Avoid contact with skin
9	Polymeric Beads Magnetized Material Carbon dioxide, solid (Dry Ice) Miscellaneous Dangerous Goods	Evolves small quantities of flammable gas Affects navigation system Causes subcooling /suffocation Hazards not covered by other classes	Avoid contact with Skin No immediate action required

Appendix D: Segregation Table/Compatibility Chart

IMP		RCX	RGX	RXB	RXC	RXD	RXE	RXG	RFG	RNG	RCL	RPG	RFL	RFS	RSC	RFW	ROX	ROP	RRY	RCM	ICE	RBI	RBM	AVI	HEG	DOC	EAT	PER	LHO	HUM	FIL
CL / Div		1.3C	1.3G	1.4B	1.4C	1.4D	1.4E	1.4G	2.1	2.2	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	7	8	9	9	9								
RCX	1.3C			X					X	X	X	X	X	X	X	X	X	X		X		X	X								
RGX	1.3G			X					X	X	X	X	X	X	X	X	X	X		X		X	X								
RXB	1.4B	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X								
RXC	1.4C			X					X	X	X	X	X	X	X	X	X	X		X		X	X								
RXD	1.4D			X					X	X	X	X	X	X	X	X	X	X		X		X	X								
RXE	1.4E			X					X	X	X	X	X	X	X	X	X	X		X		X	X								
RXG	1.4G			X					X	X	X	X	X	X	X	X	X	X		X		X	X								
RFG	2.1	X	X	X	X	X	X	X														X	X								
RNG	2.2	X	X	X	X	X	X	X																							
RCL	2.2	X	X	X	X	X	X	X																1	1	1					
RPG	2.3	X	X	X	X	X	X	X																							
RFL	3	X	X	X	X	X	X	X									X					X	X								
RFS	4.1	X	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												X											
ROX	5.1	X	X	X	X	X	X	X					X		X							X	X								
ROP	5.2	X	X	X	X	X	X	X																							
RRY	7																							2	2	2			2		2
RCM	8	X	X	X	X	X	X	X								X															
ICE	9																							1	1	1					
RBI	9	X	X	X	X	X	X	X	X				X	X			X														
RBM	9	X	X	X	X	X	X	X	X				X	X			X														
AVI											1								2		1			3	3	3	4	4		5	
HEG											1								2		1			3	3	3				5	
DOC											1								2		1			3	3	3	4	4		5	
EAT																								4		4				5	
PER																								4		4				5	
LHO																			2											5	
HUM																								5	5	5	5	5	5		
FIL																			2												

The intersection with:	
X	Requires segregation with classes/divisions as per DGR Table 9.3.A.
	Classes/divisions not included in the table above, do not require segregation.
1	Requires segregation with cryogenic liquids (RCL) and carbon dioxide, solid (ICE) as per DGR 9.3.13.1.
	Live animals (AVI) should not be loaded in close proximity of cryogenic liquids (RCL) and carbon dioxide, solid (ICE).
	Live animals (AVI) should be stowed above packages containing carbon dioxide, solid (ICE).
2	Requires segregation with radioactive material Category II and III (RRY).
	Minimum separation distance when loading RRY with live animals (AVI): 0.5m or more for journeys up to 24 hours, 1.0 m or more for journeys of more than 24 hours as per DGR 9.3.13.2.
	Minimum separation with undeveloped film (FIL) as per table DGR 10.9.E.
3	May require segregation with live animals (AVI), hatching eggs (HEG) and day old chicken (DOC).
4	May require segregation with foodstuff (EAT - includes PEM, PEP, PES) and perishables (PER).
5	May require segregation with human remains (HUM).

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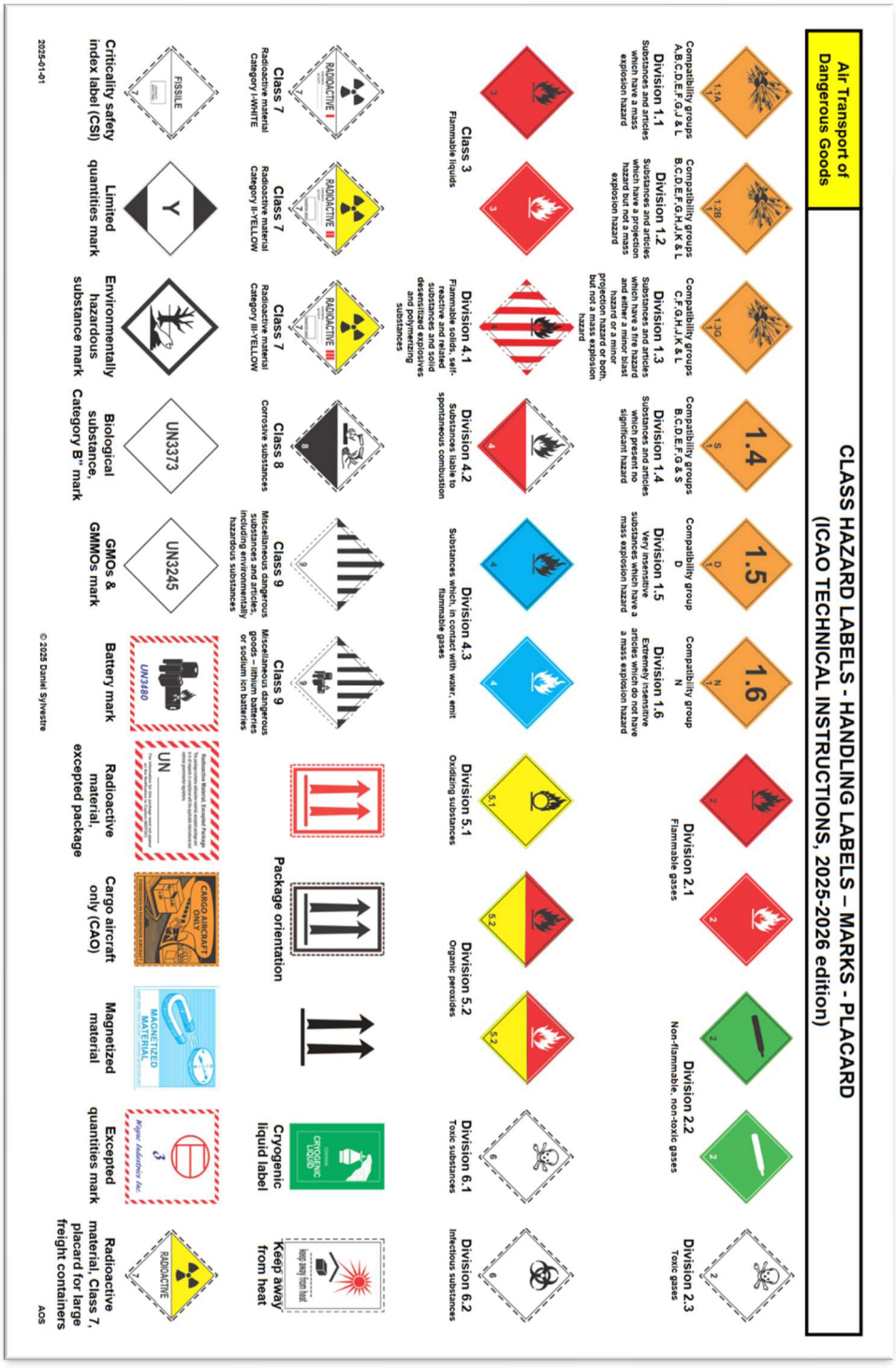
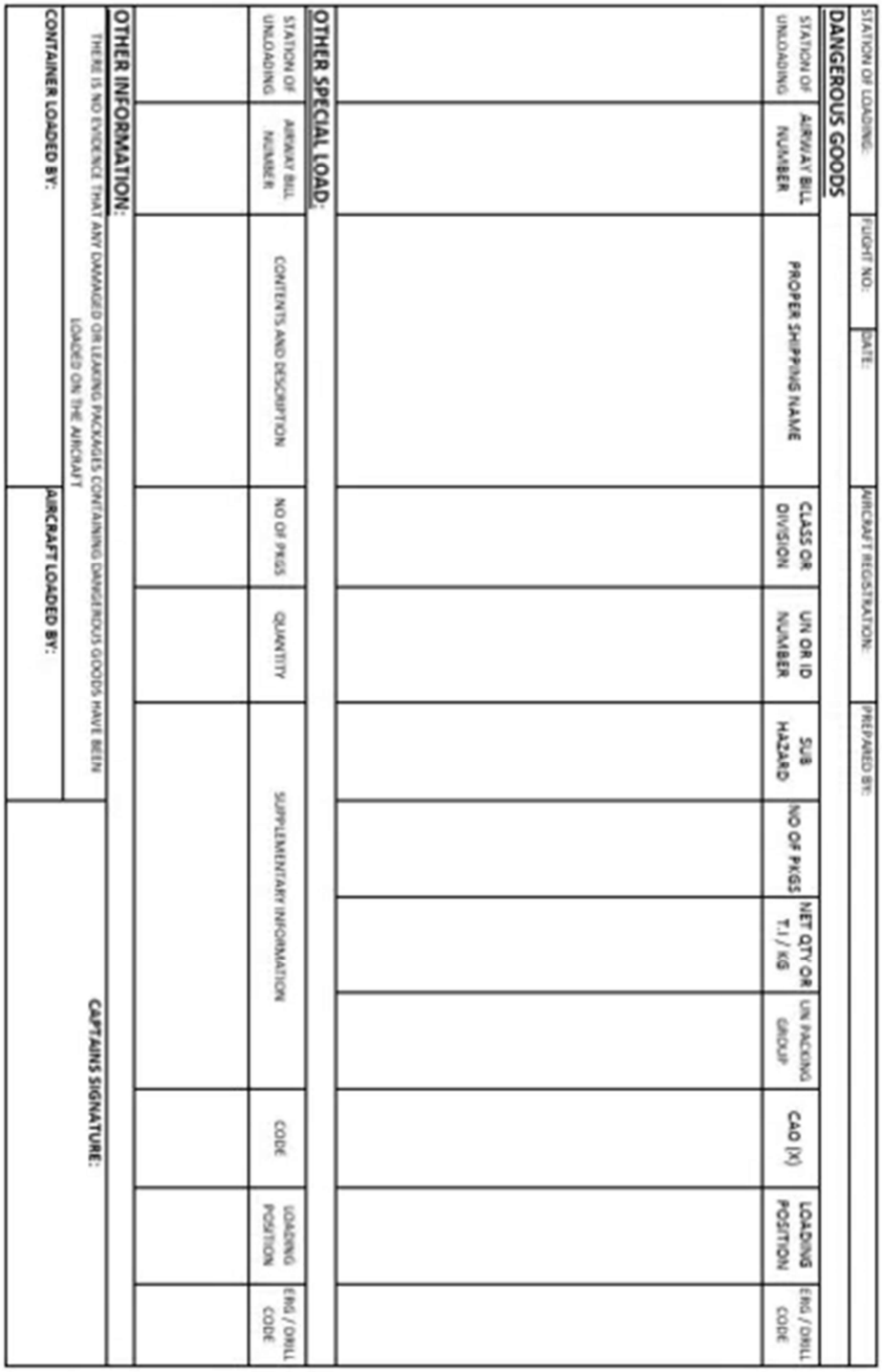
Appendix E: Example of the Hazard and Handling Labels and Marks



Appendix F: Example of NOTOC



RYANAIR SPECIAL LOAD NOTIFICATION TO CAPTAIN (NOTOC)

STATION OF LOADING: | FLIGHT NO: | DATE: | AIRCRAFT REGISTRATION: | PREPARED BY:

DANGEROUS GOODS

STATION OF UNLOADING	AIRWAY BILL NUMBER	PROPER SHIPPING NAME	CLASS OR DIVISION	UN OR ID NUMBER	SUB HAZARD	NO OF PKGS	NET QTY OR T.I / KG	UN PACKING GROUP	CAO (X)	LOADING POSITION	ERG / DRILL CODE

OTHER SPECIAL LOAD:

STATION OF UNLOADING	AIRWAY BILL NUMBER	CONTENTS AND DESCRIPTION	NO OF PKGS	QUANTITY	SUPPLEMENTARY INFORMATION	CODE	LOADING POSITION	ERG / DRILL CODE

OTHER INFORMATION:

THERE IS NO EVIDENCE THAT ANY DAMAGED OR LEAKING PACKAGES CONTAINING DANGEROUS GOODS HAVE BEEN LOADED ON THE AIRCRAFT

CONTAINER LOADED BY: | **AIRCRAFT LOADED BY:** | **CAPTAINS SIGNATURE:**

RA 188 REV1

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