Basel Convention
Technical Assistance to Parties

Improving the Management of Used Lead Acid Batteries in Wallis & Futuna

September 11th 2015

BASEL CONVENTION

SPREP
PROE

UNEP

The Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal (1989)

The Basel Convention is a global treaty that grew out of the need to stop the dumping by the developed countries of hazardous waste in developing countries. The primary objective of the Convention is to minimise, with the aim of eliminating, the generation and transboundary movement of hazardous waste. The Convention also aims at preventing illegal trafficking in waste.

By providing access to information and technical assistance on best practice guidelines and procedures for waste handling, storage and destruction, the Convention promotes the environmentally sound management and disposal of hazardous waste.

This Technical Assistance training is concerned specifically with the export of Used Lead-Acid Batteries (ULABS) for recycling overseas.

Main Points of the day's training

- **Overview** of the Basel Convention
- **Health and Environmental Impacts**
- **Battery Types**
- **Handling, Packing and Labeling**
- **Basel Documentation**
- Responsibilities of **Focal Points**
- Responsibilities of **Competent Authorities**
- Responsibilities of **Recycling companies**
- **IMO** Documentation

Objective of the Basel Convention

The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as “hazardous wastes” based on their origin and/or composition and their characteristics, as well as two types of wastes defined as “other wastes” - household waste and incinerator ash. Much of these wastes can be successfully recycled or processed for some sort of recovery, but this may involve sending them to other countries, and so movement of hazardous wastes between countries can occur where certain conditions and regulations are followed, as agreed by all parties to the Convention.

Why Bother about Basel?

- To protect countries against dumping of wastes;
- To avoid recyclers getting cargos impounded and returned at great cost;
- To avoid batteries going to poor recycling operations that poison people in other countries;
- Rules around shipping are getting tighter;
- To make shipping safer.

Where to find the Convention Details?

www.basel.int is the website

The ‘Waigani Handbook’ on your Flash Drive has full text and assistance with navigating and understanding it.

The Handbook also covers Waigani, Stockholm and Rotterdam Conventions.

Let’s look briefly at the website and the handbook now.

The handbook is included in files on the USB stick provided. We’ll also look at the other resources on the stick

Health & Environmental Impacts of ULABs

- Lead is highly toxic, especially to children;
- ULABs contain acid, which is dangerous and can burn skin and clothes and blind eyes instantly;
- Local recovery of lead for fishing & dive weights is a very poisonous business;
- Batteries in local waters and dumpsites are a very significant waste pollution problem.
- Batteries exported for recycling are very good for Tonga

Battery Types

Primary cells – like radio batteries – are not ULABs. These are usually alkaline batteries

Battery Types

- Laptop and cell phone batteries are usually Lithium batteries.
- Power tool batteries are usually Ni-Cad or Li-ion batteries
- These are not part of our training today, although these are covered by the Convention.

Battery Types - ULABS

- ‘Wet Cell’ batteries are ULABs;
- AGM batteries are ULABS;
- ‘Gel Cell’ batteries are ULABs;
- ‘Sealed’ batteries are ULABs;
- VRLA batteries are ULABs;
- ‘Low Maintenance’ batteries are ULABs

AGM & Sealed Batteries

Contain lead and acid but the acid is in a gel form and will not usually leak out easily:

Valve Regulated Lead Acid VRLA

Low Maintenance

These batteries do have liquid inside but are designed to use very little water and so have no obvious caps. These can leak. Usually used for cars.

- Charge indicator panel and handle
- Extensive range of maintenance free Japanese batteries

Fusion

- Up to 50% more starting power and a 4-year warranty
- Deep cycling capability over 300 cycles
- Totally sealed – no maintenance required

Solar Batteries

These are usually ‘wet’ and tall and heavy

Wet Cell Lead-Acid Batteries

- Used in cars, trucks, boats, motorcycles. Acid is liquid and can easily spill.

Handling

Dangerous Things to do with Batteries

- emptying of acid in batteries on to the ground or into waterways;
- lead recovery at a domestic level to make fishing sinkers and diving weights;
- Connect the terminals directly to each other to short circuit the battery.

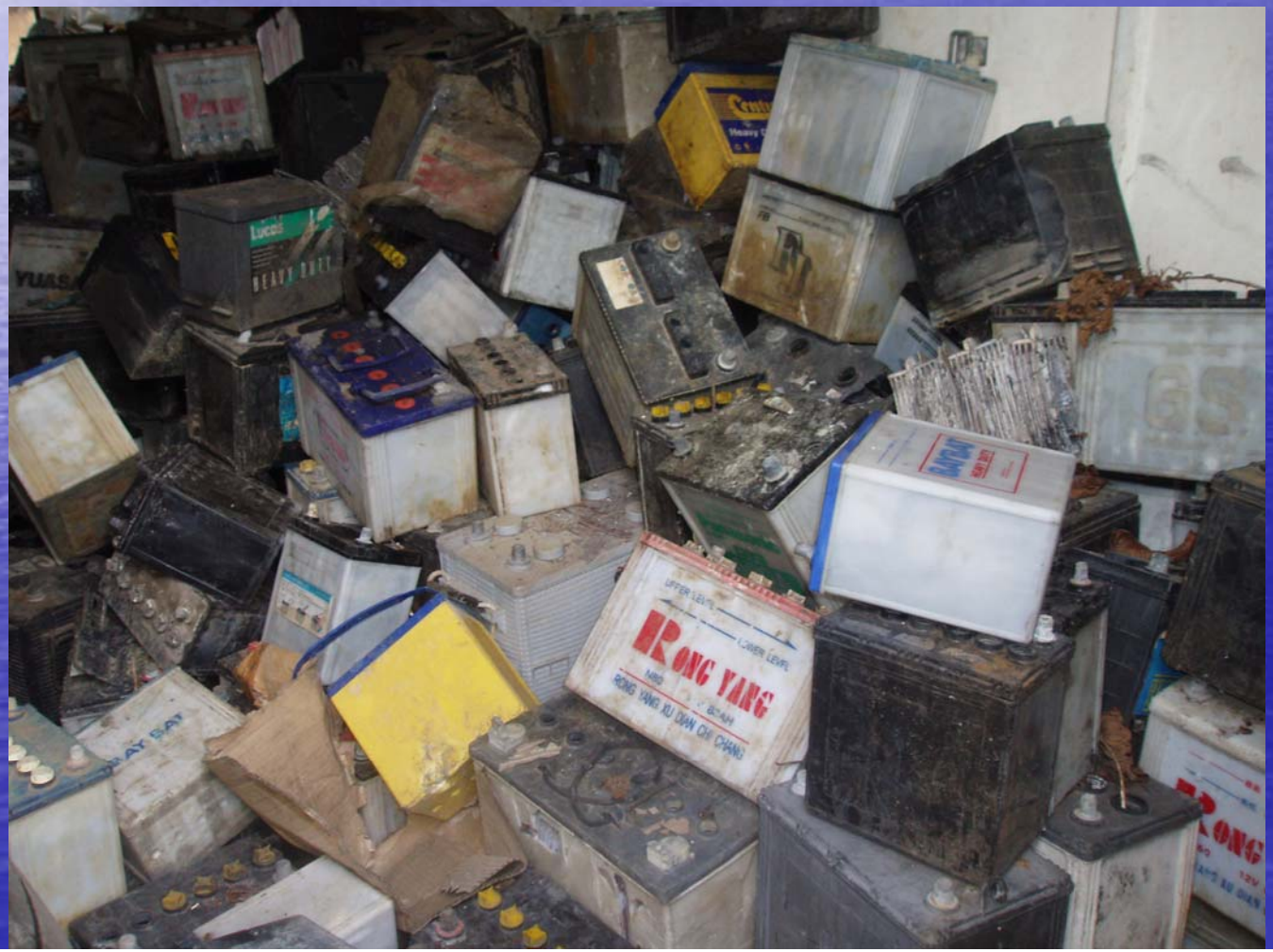
Handling

Poor handling practices:

- stacking batteries one on top of the other;
- No gloves or boots;
- No eye glasses – sunglasses are fine, wrap around glasses or goggles are best;
- No water bottle close by in case of acid on your skin;
- Holding leaky batteries next to oneself whilst carrying.

Temporary Storage

Poor storage practice:



Temporary Storage

Better:

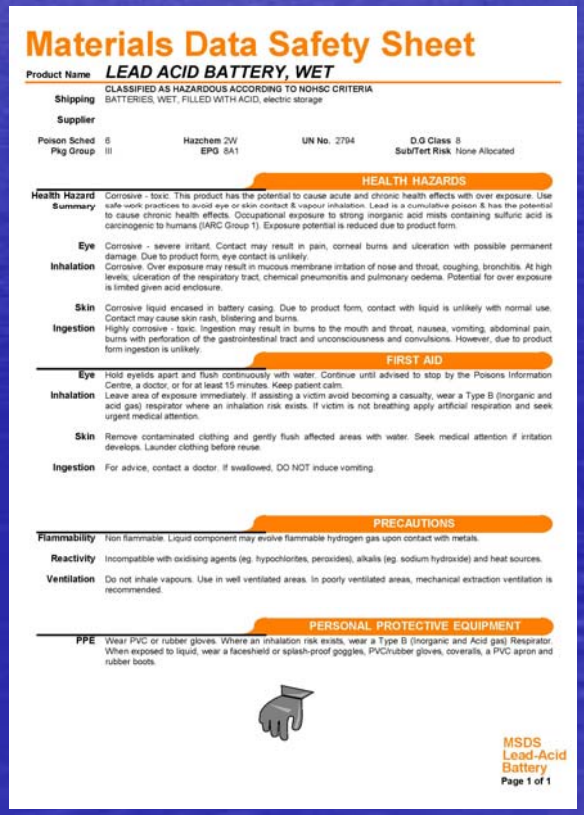
Packing

- Batteries strapped to pallets with at least two layers of cardboard between:

Packing Examples

Labeling

- Class 8 ‘Corrosive’ sign
- Materials Safety Data Sheet (MSDS)



Materials Data Safety Sheet

Product Name ***LEAD ACID BATTERY, WET***

CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

Shipping BATTERIES, WET, FILLED WITH ACID, electric storage

Supplier

Poison Sched 6 **Hazchem** 2W **UN No.** 2794 **D.G Class** 8
Pkg Group III **EPG** 8A1 **Sub/Tert Risk** None Allocated

HEALTH HAZARDS

Health Hazard Summary Corrosive - toxic: This product has the potential to cause acute and chronic health effects with over exposure. Use safe work practices to avoid eye or skin contact & vapour inhalation. Lead is a cumulative poison & has the potential to cause chronic health effects. Occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to humans (IARC Group 1). Exposure potential is reduced due to product form.

Eye Corrosive - severe irritant. Contact may result in pain, corneal burns and ulceration with possible permanent damage. Due to product form, eye contact is unlikely.

Inhalation Corrosive. Over exposure may result in mucous membrane irritation of nose and throat, coughing, bronchitis. At high levels; ulceration of the respiratory tract, chemical pneumonitis and pulmonary oedema. Potential for over exposure is limited given acid enclosure.

Skin Corrosive liquid encased in battery casing. Due to product form, contact with liquid is unlikely with normal use. Contact may cause skin rash, blistering and burns.

Ingestion Highly corrosive - toxic. Ingestion may result in burns to the mouth and throat, nausea, vomiting, abdominal pain, burns with perforation of the gastrointestinal tract and unconsciousness and convulsions. However, due to product form ingestion is unlikely.

FIRST AID

Eye Hold eyelids apart and flush continuously with water. Continue until advised to stop by the Poisons Information Centre, a doctor, or for at least 15 minutes. Keep patient calm.

Inhalation Leave area of exposure immediately. If assisting a victim avoid becoming a casualty, wear a Type B (inorganic and acid gas) respirator where an inhalation risk exists. If victim is not breathing apply artificial respiration and seek urgent medical attention.

Skin Remove contaminated clothing and gently flush affected areas with water. Seek medical attention if irritation develops. Launder clothing before reuse.

Ingestion For advice, contact a doctor. If swallowed, DO NOT induce vomiting.

PRECAUTIONS

Flammability Non flammable. Liquid component may evolve flammable hydrogen gas upon contact with metals.

Reactivity Incompatible with oxidising agents (eg. hypochlorites, peroxides), alkalis (eg. sodium hydroxide) and heat sources.

Ventilation Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended.

PERSONAL PROTECTIVE EQUIPMENT

PPE Wear PVC or rubber gloves. Where an inhalation risk exists, wear a Type B (Inorganic and Acid gas) Respirator. When exposed to liquid, wear a faceshield or splash-proof goggles, PVC/rubber gloves, coveralls, a PVC apron and rubber boots.

MSDS
Lead-Acid
Battery
Page 1 of 1

Labeling


UN 2794
CLASS 8
Wet Batteries
filled
with acid
CORROSIVE
8
Packaging
Group III
ULA 86-1

Basel Process in Simple Terms

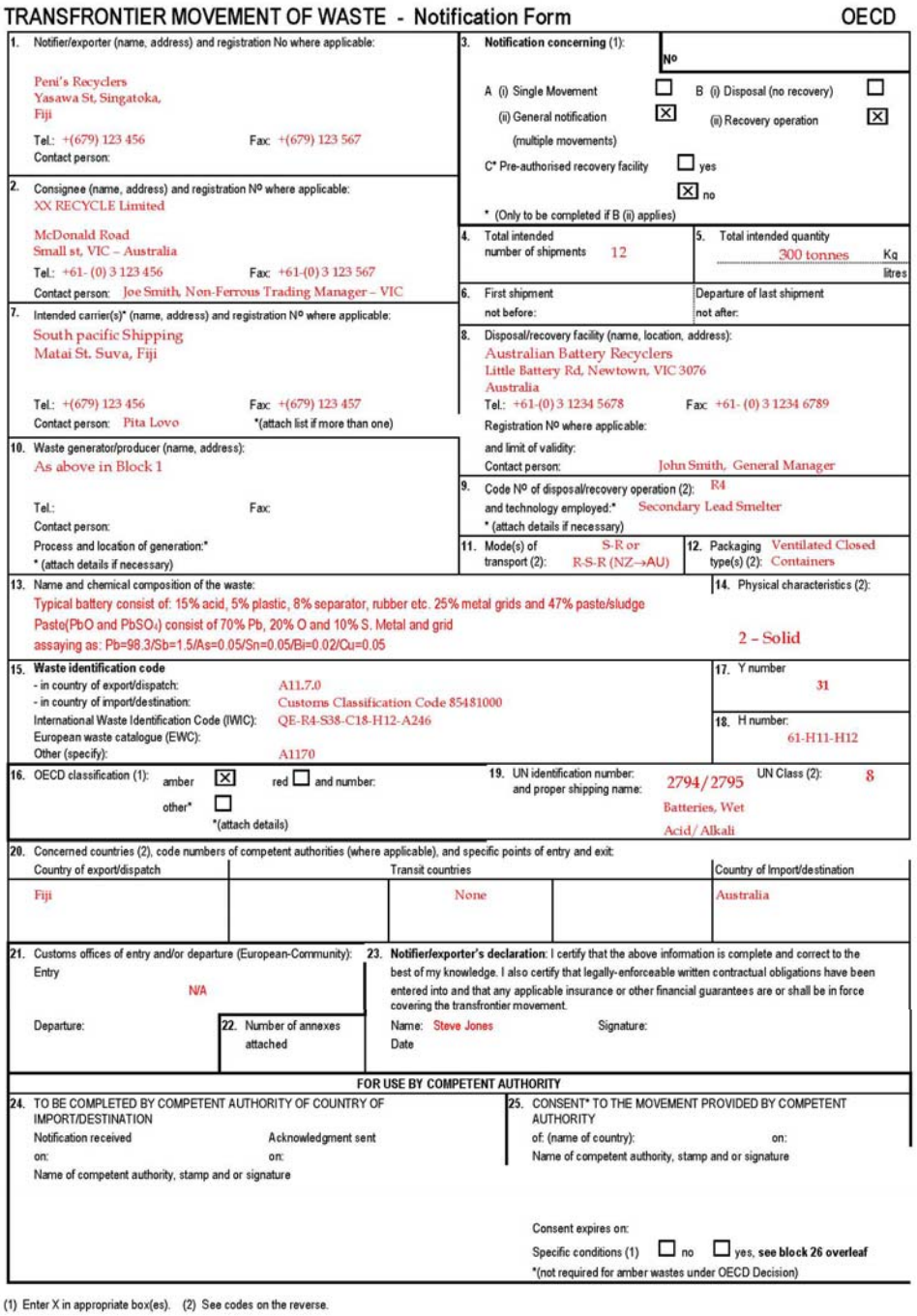
- IMPORTING country issues the Basel Permit to the Importer;
- IMPORTING country Competent Authority will contact the EXPORTING country (Kiribati) Focal Point and ask for agreement to the export;
- IMPORTING country then issues a Basel Permit to import X tonnes of ULABs from Kiribati for one year;
- Permit can be renewed every year when Kiribati agrees;
- IT is GOOD to export ULABs;
- Transit countries that the ship passes through should be notified and agree.

Basel Documentation Required

- Approval from the exporting country to export ULABs to the importing country;
- Notification Document;
- Movement Document;
- Steps required in Example Scenario in your notes

Notification Document

Let us check your Notification Doc Example sheet



TRANSFRONTIER MOVEMENT OF WASTE - Notification Form — OECD

1. Notifier/exporter (name, address) and registration No where applicable:
Peni's Recyclers
Yasawa St, Singatoka,
Fiji
Tel.: +(679) 123 456 Fax: +(679) 123 567
Contact person:

2. Consignee (name, address) and registration Nº where applicable:
XX RECYCLE Limited
McDonald Road
Small st, VIC – Australia
Tel.: +61- (0) 3 123 456 Fax: +61-(0) 3 123 567
Contact person: Joe Smith, Non-Ferrous Trading Manager – VIC

3. Notification concerning (1): Nº
A (i) Single Movement ☐ B (i) Disposal (no recovery) ☐
(ii) General notification ☒ (ii) Recovery operation ☒
(multiple movements)
C* Pre-authorised recovery facility ☐ yes ☒ no
* (Only to be completed if B (ii) applies)

4. Total intended number of shipments 12

5. Total intended quantity 300 tonnes Kg / litres

6. First shipment not before: Departure of last shipment not after:

7. Intended carrier(s)* (name, address) and registration Nº where applicable:
South pacific Shipping
Matai St. Suva, Fiji
Tel.: +(679) 123 456 Fax: +(679) 123 457
Contact person: Pita Lovo *(attach list if more than one)

8. Disposal/recovery facility (name, location, address):
Australian Battery Recyclers
Little Battery Rd, Newtown, VIC 3076
Australia
Tel.: +61-(0) 3 1234 5678 Fax: +61- (0) 3 1234 6789
Registration Nº where applicable:
and limit of validity:
Contact person: John Smith, General Manager

9. Code Nº of disposal/recovery operation (2): R4
and technology employed:* Secondary Lead Smelter
* (attach details if necessary)

10. Waste generator/producer (name, address):
As above in Block 1
Tel.: Fax:
Contact person:
Process and location of generation:*
* (attach details if necessary)

11. Mode(s) of transport (2): S-R or R-S-R (NZ→AU)

12. Packaging type(s) (2): Ventilated Closed Containers

13. Name and chemical composition of the waste:
Typical battery consist of: 15% acid, 5% plastic, 8% separator, rubber etc. 25% metal grids and 47% paste/sludge
Paste(PbO and $PbSO_4$) consist of 70% Pb, 20% O and 10% S. Metal and grid
assaying as: Pb=98.3/Sb=1.5/As=0.05/Sn=0.05/Bi=0.02/Cu=0.05

14. Physical characteristics (2): 2 – Solid

15. Waste identification code
- in country of export/dispatch: A11.7.0
- in country of import/destination: Customs Classification Code 85481000
International Waste Identification Code (IWIC): QE-R4-S38-C18-H12-A246
European waste catalogue (EWC):
Other (specify): A1170

17. Y number: 31

18. H number: 61-H11-H12

16. OECD classification (1): amber ☒ red ☐ and number:
other* ☐ *(attach details)

19. UN identification number: 2794/2795 and proper shipping name: Batteries, Wet Acid/Alkali UN Class (2): 8

20. Concerned countries (2), code numbers of competent authorities (where applicable), and specific points of entry and exit:

Country of export/dispatch	Transit countries			Country of Import/destination
Fiji		None		Australia

21. Customs offices of entry and/or departure (European-Community):
Entry N/A
Departure:

22. Number of annexes attached

23. **Notifier/exporter's declaration**: I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into and that any applicable insurance or other financial guarantees are or shall be in force covering the transfrontier movement.
Name: Steve Jones Signature:
Date

FOR USE BY COMPETENT AUTHORITY

24. TO BE COMPLETED BY COMPETENT AUTHORITY OF COUNTRY OF IMPORT/DESTINATION
Notification received on: Acknowledgment sent on:
Name of competent authority, stamp and or signature

25. CONSENT* TO THE MOVEMENT PROVIDED BY COMPETENT AUTHORITY
of: (name of country): on:
Name of competent authority, stamp and or signature
Consent expires on:
Specific conditions (1) ☐ no ☐ yes, **see block 26 overleaf**
*(not required for amber wastes under OECD Decision)

(1) Enter X in appropriate box(es). (2) See codes on the reverse.

Customs Tariff Numbers

The HS numbers for batteries are:

- Scrap Batteries: 8548: **Waste and scrap of primary cells, primary batteries and electric accumulators; spent primary cells, spent primary batteries and spent electric accumulators; electrical parts of machinery or apparatus**
- New Lead-Acid Batteries: 8507: **Electric accumulators: 8507.10 and 8507.20 are specifically lead acid**
- **Other Batteries are in 8506, these are not Lead-acid batteries.**
- The Basel system is working on developing HS codes to identify wastes more clearly.

Basel Focal Point

Roles and responsibilities:

- Primary point of contact with the Government of Kiribati concerning the Basel Convention;
- This is where any requests to agree exports, or notify of any passing cargos, will come;
- Must be in regular contact with the Competent Authority;
- Must be an email that is checked daily on work days. Must have a current phone number.

Competent Authority

Roles and responsibilities:

- Technical people who understand the process;
- Advise that an export can take place;
- Check packing and labeling;
- Make sure that the Notification and Movement documentation is correct;
- Make sure IMO Dangerous Goods Declaration is in place.

Competent Authority

- Must be in regular contact with the Focal Point;
- Must be an email that is checked daily on work days. Must have a current phone number;
- Must know who to email/call in SPREP for any assistance;
- Must make sure any recycling companies and shipping agents know who is responsible for Basel in the Government.

Changes to Competent Authority or Focal Point

- Must inform Basel Convention Secretariat of any contact changes to either position;
- Have one month to do so from time of change;
- This is very important or else the entire system breaks down.

International Maritime Organization Documentation (IMO)

- IMO is responsible for international shipping rules, including safety at sea;
- IMO has a Dangerous Goods Code, and ULABs are classed as Dangerous Goods (DG)
- DG must be marked clearly so the ship's captain and crew know what is inside the containers;
- DG must be declared on a DG Declaration Form that goes with the Bill of Lading.

IMO DG Declaration

MULTIMODAL DANGEROUS GOODS FORM

This form may be used as a dangerous goods declaration as it meets the requirements of SOLAS 74, chapter VII, regulation 4; MARPOL 73/78, Annex III, regulation 4.

1 Shipper/Consignor/Sender		2 Transport document number		
		3 Page 1 of pages	4 Shipper's reference	
			5 Freight forwarder's reference	
6 Consignee		7 Carrier (to be completed by the carrier)		
		SHIPPER'S DECLARATION I hereby declare that the contents of this consignment are fully and accurately described below by the Proper Shipping Name, and are classified, packaged, marked and labelled/placarded and are in all respects in proper condition for transport according to the applicable international and national governmental regulations.		
8 This shipment is within the limitations prescribed for: (Delete non-applicable) PASSENGER AND CARGO AIRCRAFT / CARGO AIRCRAFT ONLY		9 Additional handling information		
10 Vessel/flight No. and date	11 Port/place of loading			
12 Port/place of discharge	13 Destination			
14 Shipping marks	* Number and kind of packages; description of goods		Gross mass (kg)	Net mass (kg) / Cube (m^3)
15 Container identification No./ vehicle registration No.	16 Seal number(s)	17 Container/vehicle size & type	18 Tare mass (kg)	19 Total gross mass (including tare) (kg)
CONTAINER/VEHICLE PACKING CERTIFICATE I hereby declare that the goods described above have been packed/loaded into the container/vehicle identified above in accordance with the applicable provisions.† **MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER/VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING/LOADING**		21 RECEIVING ORGANISATION RECEIPT Received the above number of packages/containers/trailers in apparent good order and condition, unless stated hereon: RECEIVING ORGANISATION REMARKS:		
20 Name of company		Haulier's name Vehicle reg. no.		22 Name of company (OF SHIPPER PREPARING THIS NOTE)
Name/status of declarant		Signature and date		Name/status of declarant
Place and date				Place and date
Signature of declarant		DRIVER'S SIGNATURE		Signature of declarant

* **DANGEROUS GOODS:**
You must specify: UN No., Proper Shipping Name, hazard class, packing group, (where assigned) marine pollutant and observe the mandatory requirements under applicable national and international governmental regulations. For the purposes of the IMDG Code, see 5.4.1.4.

† For the purposes of the IMDG Code, see 5.4.2.

Insurance

- Insurance may be required if the country demands it;
- Transit countries may require it;
- Typically will be an ‘open insurance’ policy
- This can be a sticking point where local insurers cannot provide this.

Questions and Discussions?


Malo