



Civil Aviation Department
Hong Kong, China

DG Experience Sharing

Dangerous Goods Office May 2012

Incorrect Packing of Dry Ice



Packaging must be designed and constructed to permit the release of carbon dioxide gas and to prevent a build-up of pressure that could rupture the packaging



Points to Consider

- **Are there release holes constructed into the packaging to prevent the build up of pressure by the Dry Ice?**
- **Did the shipper ensure that the release holes are not blocked or covered up?**
- **What is the total quantity of Dry Ice allowed by the airline on the particular aircraft type?**

Large Lithium Batteries



Poor Quality of Packaging

Packaging unable to protect batteries from fall, short circuit or accidental activation



Fire and Resulting Damage



Points to Consider

- **Lithium batteries larger than 100 watt-hour (wh) must be transported as Declared Class 9 DG**
- **eg: $20\text{ V} \times 5\text{ Ah} = 100\text{ watt-hour (wh)}$**
- **Lithium batteries must be tested to the safety standards of the UN Manual of Tests and Criteria, Part III, subsection 38.3**
- **Batteries must be protected from short circuit or accidental activation**
- **Packaging must protect the contents from possible damage caused by a fall from 1.2 m (4')**

Hidden DG in Airmail



A commercial shipper posted some packages of liquid fragrance in airmail. Later, the packages were rejected in the postal processing facility



Points to Consider

- **DG must not be transported in airmail (eg. Perfume, Nail Polish and Lithium Batteries)**
- **Airlines and freight forwarders should inform their commercial customers that DG are not accepted by airmail**
- **Screening by X-ray may be necessary in case of any doubt about the content of a package**
- **Record of packages rejected for safety reasons should be kept for investigation and audit purpose**

Hidden DG in Excess Baggage Consignment



An airline passenger bought a gasoline powered generator and then consigned it as excess baggage



Points to Consider

- **Only those DG listed under IATA DGR Table 2.3.A can be transported inside excess baggage**
- **Excess baggage must be marked with the words “Excess baggage consigned as cargo”**
- **Did the acceptance personnel see the descriptions and diagram on the package?**
- **Was there sloshing sound of liquid inside?
Was there smell of gasoline?**
- **Did the acceptance personnel ask the airline passenger about the content of the package?**

Hidden DG in Cargo Consignment



A freight forwarder consigned a large quantity of signal flares as general cargo, which should have been classified as Class 1 Explosives



Points to Consider

- **Signals, Flares and Smoke are Class 1 Explosives. Many are forbidden from air transport due to mass explosion and fire hazards**
- **Explosives are controlled commodities which must have proper import and export documentation**
- **Explosives must be stored in Explosives Depots and must not be stored in the freight forwarder's warehouse**
- **Road transport of Explosives is also subject to Government regulations**

An aerial photograph of an airport. On the left, a tall, cylindrical air traffic control tower stands prominently. The tower has a white base and a glass-enclosed upper section. To the right of the tower, a wide, paved runway stretches into the distance. In the background, a range of dark, forested mountains is visible under a bright, slightly hazy sky. The overall scene is captured from a high angle, providing a clear view of the airport's infrastructure.

Conclusions

Points to remember -

- 1. Shippers must use proper venting in a package containing Dry Ice**
- 2. Large lithium batteries must be declared as Class 9 DG**
- 3. DG are not accepted in Airmail**
- 4. DG are not accepted in excess baggage excepted those transported in accordance with IATA DGR Table 2.3.A**
- 5. Signals, Flares and Smoke are controlled commodities**

Points to remember -

- 5. If there is any doubt about the content of a consignment, always confirm with the shipper**
- 6. Refer to the Blue Pages of the IATA DGR**
- 7. Keep a record of all rejected cargo involving DG**
- 8. Disseminate the information to all parties concerned including cargo sales staff after any occurrences or incidents to enhance awareness**



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Further Information –

<http://www.cad.gov.hk/english/dangerousgoods.html>

Email: DGO@cad.gov.hk