

**CIRCULAR**

**REGULATION ON LIST OF DANGEROUS INDUSTRIAL GOODS WITH PACKAGING  
REQUIRED DURING TRANSPORTATION AND TRANSPORTATION OF DANGEROUS  
INDUSTRIAL GOODS BY ROADWAY, RAILWAY AND INLAND WATERWAY MOTOR  
VEHICLE**

*Pursuant to Decree No. 104/2009/ND-CP dated November 9, 2009 of the Government regulating the list of dangerous goods and transportation of dangerous goods by roadway motor vehicles;*

*Pursuant to Decree No. 109/2006/ND-CP dated September 22, 2006 of the Government detailing and guiding a number of articles of the Law on Railways; Decree No. 03/2012/ND-CP dated January 19, 2012 of the Government amending and supplementing a number of articles of Decree No. 109/2006/ND-CP dated September 22, 2006 of the Government detailing and guiding the implementation of some articles of the Law on Railway;*

*Pursuant to Decree No. 29/2005/ND-CP dated March 10, 2005 of the Government regulating the list of dangerous goods and transportation of dangerous goods on inland waterway;*

*Pursuant to Decree No. 95/2012/ND-CP dated November 12, 2012 of the Government defining the functions, tasks, powers and organizational structure of the Ministry of Industry and Trade;*

*The Minister of Industry and Trade issues Circular regulating list of dangerous industrial goods with packaging required during transportation and transportation of dangerous industrial goods motor transport by roadway, railway and inland waterway motor vehicles.*

**Section 1. GENERAL PROVISION**

**Article 1. Scope of adjustment**

This Circular regulates the list of dangerous industrial goods with packaging required during transportation; requirements on packaging and containing means for dangerous industrial goods, emergency response plans and training of persons directly involved in transportation of dangerous industrial goods by roadway, railway and inland waterway motor vehicles.

List of dangerous industrial goods does not include the following types of dangerous goods as follows

1. The chemicals used for the purpose of national defense and security are managed by the Ministry of Defense and the Ministry of Public Security;
2. Pesticides; chemicals, insecticides, disinfectants in the field of household and health;
3. Substances as explosives, industrial explosive materials;
4. The chemicals of type 6 specified in Article 4 of Decree No. 104/2009/ND-CP dated November 9, 2009 of the Government regulating the list of dangerous goods and transportation of dangerous goods by roadway motor vehicles.

## **Article 2. Subject of application**

This Circular applies to the organizations and individuals transporting dangerous industrial goods by roadway, railway and inland waterway motor vehicles.

## **Article 3. Explanation of terms**

In this Circular, the terms below are construed as follows:

1. " Dangerous chemicals" are the chemicals specified in Clause 4, Article 4 of the Law on Chemicals dated November 21, 2007;
2. "' Dangerous industrial goods" include petroleum, natural gas and hazardous chemicals used in industrial production;
3. "Packaging of dangerous industrial goods" is the use of technical manipulation to contain hazardous industrial goods in containing means in accordance with the registered and published standards;
4. "'Containing means" is the types of packaging, bottles, barrels, tanks or containers used for storage and transportation of goods. The containing means of dangerous industrial goods include:
  - a) "Small-size packaging" (symbol as P) as containing means with water storage capacity up to 450 liters or containing mass up to 400 kg;
  - b) "'Big-size packaging" (symbol as LP) is containing means with water storage capacity greater than 450 liters or containing mass greater than 400 kg but containing volume less than 3m<sup>3</sup>;
  - c) Medium-size bulk container" (symbol as IBC) includes:

Metal barrel with maximum containing volume of 3m<sup>3</sup> with liquid and solid goods;

Wooden, plastic and paper barrel with containing volume up to 1.5 m<sup>3</sup> for solid goods.

d) "Inner packaging" (also known as direct packaging) is containing means directly contacting the cargo fulfilling the functions of goods containing without any additional packaging;

e) "Outer packaging" means the containing means of inner packaging, together with the absorbent and buffering and inserting materials to create protection of inner packaging during transportation;

g) "Combined packaging " is the containing means including one or more packagings, attached, fixed in the outer packaging;

h) "Specialized basin and tank" is containing means amounted mounted on means of transportation

Containing means with capacity greater than 1m<sup>3</sup> or type of tank-container with capacity greater than 3m<sup>3</sup> containing dangerous goods of type 3 with flash point temperature not greater than 600C (FL type, see Appendix 3 for details);

Containing means with capacity greater than 1m<sup>3</sup> or tank-container with capacity greater than 3m<sup>3</sup> containing dangerous goods different from type FL (Type AT, see Appendix 3 for details);

i) "Container" is barrel and box-shaped containing means with containing capacity greater than 1m<sup>3</sup> for containing and transshipment of all kinds of goods completely packaged

5. "Bulk" is not packaged goods;

6. "Packaging norm" is the norm fixed depending on the level danger of the goods to be packaged (symbol as PG I, PG II, PG III);

7. "List of dangerous industrial goods with packaging required during transportation" is the list specified in Annex 1 of this Circular (hereafter referred to as List).

## **Section II. REQUIREMENT ON PACKAGING, CONTAINING MEANS FOR DANGEROUS INDUSTRIAL GOODS**

### **Article 4. Requirements on danger symbol and sign**

1. Size, symbol, color, danger symbol and sign shall comply with the provisions of Circular No. 04/2012/TT-BCT dated February 13, 2012 of the Minister of Industry and Trade concerning the regulation on classification and labeling of chemicals; emergency information panel shall comply with the provisions of Appendix 4 of this Circular.

2. The presentation of danger symbol and sign must satisfy the following requirements:

a) Shown in Vietnamese and English clearly, legibly with color contrast to background color of the containing means.

b) Place to stick danger signs is below the danger symbol; not being obscured or reduced the possibility of identification when placed next to other signs;

c) Having durability enough to withstand the impact effects of weather and normal impact upon loading, unloading and transportation;

d) Where the surface of the containing means is uneven or too small compared to the size required to show the danger symbol and sign, the consignor may attach means of card holder or panel showing the danger symbol and sign as prescribed.

3. Containing means of hazardous industrial goods upon transportation must be fully danger symbol and sign as follows:

a) For inner packaging upon transportation without outer packaging or intermediary containing means, the danger symbol and sign must be shown on the unobscured side of the inner packaging.

b) For combination packaging not being opened during loading, unloading and transportation, the danger symbol and sign must be shown at least on one side of the outer packaging. The outer packaging with volume greater than 450 liters must be shown its danger symbol and sign on either side, facing each other;

c) For container, the danger symbol and sign shall be shown on two lateral sides and back side;

d) For specialized basin and tank, the danger symbol and sign shall be shown on two lateral sides and back side. In case the specialized basin and tank have many compartments to contain different kinds of goods, the danger symbol and sign of each kind of goods shall be shown on both outer sides of each compartment corresponding to the goods in it.

e) If on a vehicle, the containers place more than a kind of dangerous industrial goods, then outside the vehicle and container, there must be the danger symbol and sign and danger number of the kinds of corresponding dangerous goods being transported on that vehicle and container.

4. For roadway and railway motor vehicles transporting bulk goods with the volume greater than the level specified in column 7 of the list, in addition to the danger symbol and sign, there must be emergency information panel placed at the end of the vehicle; the bottom edge of the emergency information panel must be at least 450 mm above the ground. The size, layout and content of emergency information panel as specified in Appendix 4 of this Circular.

## **Article 5. Requirements on packaging of dangerous industrial goods.**

1. Except for dangerous industrial goods of type 2, 5.2 and 4.1, the dangerous industrial in liquid and solid form shall be packaged under 3 levels specified in column 6 in the List as follows:

- a) Very dangerous level denoted by figure I (PG I);
- b) Dangerous level denoted by figure II (PG II);
- c) Low dangerous level denoted by figure III (PG III);

Specific regulation on the packaging level in Appendix 2 of this Circular.

2. The dangerous industrial packaging code specified in column 8 of the list. The requirements for materials, packaging conditions and detail and specification of packaging of dangerous industrial goods corresponding to each packaging code specified in Appendix 3 to this Circular.

3. The production organization or carrier of dangerous industrial goods must package dangerous industrial goods in accordance with the current Standard and Regulation and not leak and spill in the packaging process.

#### **Article 6. Requirement on inspection and testing the containing means**

1. The containing means of dangerous industrial goods newly produced or used many times must be tested before packaging.

2. The organization of production and import of the containing means must comply with the provisions of the Law on product and goods quality. The packaging organizations of dangerous industrial goods are only allowed to use the containing means which have been tested under the following provisions:

a) For containing means bearing no pressure, with the containing capacity of less than 3m<sup>3</sup> and not as dangerous industrial goods to be packaged under level PG I, having been tested and published the conformity with the standards applicable to the containing means under current regulations on product quality inspection;

b) For the remaining containing means, the containing means of dangerous industrial goods tested by the functional units of industrial safety inspection or registration agency (for inland waterway means of transportation).

3. The containing means of dangerous industrial goods after use as the disposable types or do not meet requirements of periodic testing as the multiple use types must be disposed under provisions in the current legal normative documents on management of hazardous wastes.

### **Section III. TRANSPORTATION OF DANGEROUS INDUSTRIAL GOODS**

#### **Article 7. Requirements for people involved in transportation of dangerous industrial goods**

1. The carrier must appoint the escort when transporting dangerous industrial goods with the volume greater than the level specified in column 7 of the List.

2. Drivers of roadway motor vehicles, escorts and loading employees and storekeepers of dangerous industrial goods must meet the following requirements:

- a) Being trained the safety engineerings in transportation of dangerous industrial goods;
- b) Being healthy to meet requirements of each business line in accordance with the current labor law;
- c) Fully equipped with personal protective equipment suitable for dangerous industrial goods transported in accordance with the current regulations on labor safety;
- d) The drivers of roadway motor vehicle in addition to meeting the requirements specified at points a, b, and c of this Clause must be issued Certificate of safety engineering training in transportation of dangerous industrial goods.

3. Contents of safety engineering training in transportation of dangerous industrial goods include:

- a) The legal normative documents related to the transportation of dangerous industrial goods;
- b) The dangerous properties of industrial goods to be transported; the danger symbol and signs on the transporting and containing means;
- c) The type of packaging, containers of dangerous industrial goods to be transported; requirement of inspection and testing;
- d) The safety measures in loading, unloading and transportation of dangerous goods industry; measures and procedures for implementation upon occurrence of accident, incident on road transport (information about rescue and salvage; assistance on the spot; collision prevention, ignition sources, use of rescue facilities, remedy of fire and explosion, toxic dissemination, etc.) for dangerous industrial goods do not require the emergency incident response planning during transport;
- e) The plan for emergency incident response for dangerous industrial goods with requirement for emergency incident response planning

#### **Article 8. Dossier, order, procedure, time limit, method of issuance of Certificate of safety engineering training in transportation of dangerous industrial goods**

1. Dossier to request the issuance of Certificate of safety engineering training in transportation of dangerous industrial goods (hereafter referred to as Certificate) includes (01 set):

- a) Application for issuance of Certificate under the Form 1 specified in Appendix 6;

b) Certified copies (In case of filing via post/ administrative dispatch) or copy together with original for comparison (In case of direct filing) of driving license in line with road motor vehicles used to transport dangerous industrial goods;

c) 02 photos 3 x 4 cm of the person requesting the issuance of certificate.

2. Within two (02) working days from the date of receipt of the dossier to request the issuance of certificate, the Service of Trade and Industry shall notify organizations and individuals to complete their dossier in the case of incomplete or invalid dossier.

3. Within twenty (20) working days after receiving complete and valid dossiers, the Service of Trade and Industry is responsible for the organization of training, test and issuance of Certificate (Form 2 in Appendix 6) or written reply stating the reasons in the absence of issuance of certificate.

4. Dossier to request the issuance of Certificate shall be submitted directly or via post to the Service of Trade and Industry in the area of management.

5. Certificate of safety engineering training in transportation of dangerous industrial goods is valid within and effective nationwide.

#### **Article 9. Emergency response**

1. The transport of dangerous goods in bulk with the quantity greater than that specified in column 7 of the List, there must be an emergency response plan; the contents of the emergency response plan specified in Appendix 5 of this Circular.

2. In case of transportation of dangerous industrial goods not subject to Clause 1 of this Article, there must be a chemical safety form including the troubleshooting instructions for the spill, leakage or explosion of goods being transported. The content of chemical safety form as prescribed in Circular No. 28/2010/TT-BCT dated June 28, 2010 of the Minister of Industry and Trade shall specify a number of articles of the Law on Chemicals and Decree No. 108 / 2008/ND-CP dated October 7, 2008 of the Government detailing and guiding a number of articles of the Law on Chemicals.

3. Emergency response plan or troubleshooting instructions must be carried during transportation of dangerous industrial goods and kept in a conspicuous position on the vehicle cockpit by the driver of the vehicle.

4. The drivers and escorts of the vehicle must understand the content of the emergency response plan or troubleshooting instruction and proficiently perform rescue procedures and use equipment to handle fires, spill, and leakage. Before each transportation of dangerous industrial goods, the vehicle drivers have to check and test the warning, troubleshooting equipment and necessary procedures upon occurrence of incidents.

Annually, the carrier must organize practice of troubleshooting by the set emergency response plan

5. In the case of incidents, accidents, fires and explosion or traffic obstruction, escorts and drivers of the vehicle shall immediately zone the incidents or accidents, set alerts to prevent gathering, entering into the dangerous area and eliminate the possibility of appearance of ignition sources in the incident area in order to avoid danger to people who are involved in traffic; immediately notify the local People's Committee, the goods consignor, the agency responsible for rescue, salvage and Service of Trade and Industry in the locality where the incident occurs; the contents to notify accidents and incidents include the following information:

- a) Place of incident and accident occurrence;
- b) Name of the goods transported under the List or UN code of the goods;
- c) Volume of the goods transported prior to incident and accident occurrence;
- d) Condition of incident (fire, explosion or leakage) and damage of the containing means and the condition of the vehicle;
- e) Damages on the spot (if any) of people and property;
- g) Remedial measures are being implemented and the requirements for emergency assistance to victims and troubleshooting means (fire fighting, collection, goods moving, etc.).

## **Section IV. IMPLEMENTATION ORGANIZATION**

### **Article 10. Implementation organization**

1. Department of Safety Engineering and Industrial Environment, Ministry of Industry and Trade is responsible for guiding and monitoring the implementation of this Circular; receiving and solving problems and difficulties of the organizations or individuals concerned.

2. Service of Industry and Trade of centrally-affiliated shall:

- a) Popularize and guide organizations and individuals to transport dangerous industrial goods on the management area to implement the provisions of this Circular;
- b) Organize training, testing and issuance of certificate of technical safety engineering training to drivers of roadway motor vehicles on the management area;
- c) Organize inspection and examination of the compliance with conditions for transportation of dangerous industrial goods; sanction administrative violations in the transportation of dangerous industrial goods as prescribed.

### **Article 11. Effect**



1. This Circular takes effect on February 20, 2013 and replaces Circular No. 02/2004/TT-BCN dated December 31, 2004 of the Ministry of Industry detailing a number of articles of Decree No. 13/2003/ND-CP dated February 19, 2003 of the Government stipulating the List of dangerous goods and transportation of dangerous goods by road.

2. In case the national Standards and Regulation referred to in this Circular are amended, supplemented or replaced, then the Standards and Regulation amended and supplemented or newly published shall be used.

**PP. MINISTER  
DEPUTY MINISTER**

**Le Duong Quang**

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