

Revised Policy Rule on Exemptions for the Transport of Fireworks in Sea-Going Vessels

29 July 2002/DGG/V/02/005/704

The Minister of Transport, Public Works and Water Management, in view of Article 9(1) of the Act on Transport of Dangerous Substances, in conjunction with Article 13(1) of the Regulation for the Carriage of Dangerous Substances in Sea-going Vessels

Has issued the following decision:

Article 1

1. On the basis of the information supplied with the application, the net explosive mass of fireworks shall be calculated as follows: the aggregate of the total net mass in kilograms of the explosive substance in fireworks from divisions 1.1 to 1.3 (inc.) and 50% of the total net mass in kilograms of the explosive substance in fireworks from division 1.4.
2. In derogation from Article 1(1), on the basis of the application of the standard classification of firework devices contained in Appendix 1, the net explosive mass for the fireworks may be determined as follows: the aggregate of the total net mass in kilograms of the explosive substance in fireworks from divisions 1.1 to 1.3 (inc.) and 5% of the total net mass in kilograms of the explosive substance in fireworks from division 1.4.

Article 2

1. For the application of this policy rule, the term ‘vulnerable objects’ means:
 - a. homes (excluding ‘workers home’);
 - b. sheds or trailers in the terms of the Housing Act;
 - c. berths in the terms of the Housing Allocation Act;
 - d. buildings used for day care for minors;
 - e. buildings used mainly or exclusively by an educational institution;
 - f. hospitals, nursing homes and care institutions;
 - g. other buildings intended to be stayed in, whether for part of a day or otherwise, by minors, senior citizens, patients or handicapped persons;
 - h. hotels, penitentiaries and asylum seekers’ centres;
 - i. offices;
 - j. shops, restaurants and cafes;
 - k. camping sites;
 - l. buildings for the purpose of practising a religion or philosophy on life;
 - m. other objects and sites that must be deemed vulnerable given the nature of their function or the average time each day during which people stay in them;
 - n. objects of great infrastructural importance, insofar as those objects require protection against any accident, in view of the nature of the dangerous substances that could be released upon an accident;
2. The objects listed under i, j, m and n are not to be deemed ‘vulnerable objects’ insofar as they are located on land that has been designated, in a zoning plan, municipal master plan, or by or pursuant to a municipal ordinance, for the sole or joint purpose of being a location for harbour-related activities.

Article 3

An exemption from the maximum amounts of explosive substances permitted on board sea-going vessels shall, if the request relates entirely or in part to the inbound or outbound sea-transport of fireworks, be granted with respect to fireworks only if the terms of this policy rule are satisfied.

Article 4

The concerned party shall, as soon as possible but no later than 10 working days before the expected arrival of the sea-going vessel at the harbour, submit a completed application for an exemption to the Transport Inspectorate Netherlands (*IVW*), to the Transport Division, Division Dangerous Goods and Counsel in the Hague. That application shall contain at least the following information, in Dutch or in English:

- total amount of the net explosive mass;
- a correctly filled-out multi-modal dangerous goods form; and
- the intended berth and its distance from vulnerable objects, calculated from the place where the fireworks are located on board the sea-going vessel.

If the intended berth is based on the application of Article 1(2), the application shall also contain all of the information, including packing lists, which is necessary for the application of the standard classification of firework devices, as contained in Appendix 1.

Article 5

Upon a request for exemption, the external safety will be assessed on the basis of the amount of the net explosive mass transported on board the sea-going vessel, in combination with the distance between the intended berth and the vulnerable objects.

Article 6

On the basis of this policy rule, the following minimum distances from vulnerable objects apply to the planned berth, based on the net explosive mass on board the sea-going vessel. The distances specified are measured from the place where the fireworks are located on board the sea-going vessel.

Distance to vulnerable objects (in metres)	Maximum permissible amount of net explosive mass (in kg)
300	3,000
350	4,000
400	6,000
450	9,000
500	12,000
600	20,000
700	32,000
800	52,000
900	75,000
1000	100,000
1500	300,000

Article 7

If the terms of Article 4 are not complied with, the application in question will not be accepted for consideration.

Article 8

If the terms of Article 6 are not complied with, the application for exemption will be rejected.

Article 9

The Policy Rule on Exemptions for the Transport of Fireworks in Sea-going Vessels (Netherlands Government Gazette 2002, 126) is hereby withdrawn.

Article 10

This policy rule will enter into force on 1 August 2002.

Article 11

This policy rule will be referred to as: 'Revised Policy Rule on Exemptions for the Transport of Fireworks in Sea-going Vessels'.

This policy rule, together with the explanatory notes, shall be published in the Netherlands Government Gazette.

The Minister of Transport, Public Works and Water Management
R.H. de Boer

Explanatory notes

Article 13(1) of the Regulation for the Carriage of Dangerous Substances in Sea-going Vessels (*RVGZ*) sets the maximum permitted amounts of explosive substances on board sea-going vessels. Those amounts date back to the time when explosive substances were still transported as conventional cargoes by sea-going vessels. However, as a result of the use of sea-containers and the accompanying increases in scale, it has become evident in recent years that, for logistical reasons, those amounts are too restrictive. Furthermore, it was also concluded that exceeding those amounts to a certain extent was not necessarily irresponsible from the perspective of safety.

The Regulation for the Carriage of Dangerous Substances in Sea-going Vessels is now being thoroughly revised. The new regulation is expected to increase the amounts currently set out in Article 13(1). Further study is currently being undertaken to determine, in view of new insights and experiences, the extent to which those amounts may be increased.

For a number of years, permission has been given, under certain circumstances, for larger amounts of explosives than those set out in Article 13(1) of the *RVGZ* to be transported on board sea-going vessels. The amount by which the limit may be exceeded is determined on the basis of the amounts of the net explosive mass to be transported in combination with the intended berth of the sea-going vessel. Until 26 September 2001, the maximum amounts for explosive substances could be exceeded, within certain limits, without an exemption being required. However, that was

brought to an end by a notice in the Netherlands Government Gazette as of 26 September 2001 (Netherlands Government Gazette, 26 September 2001, no. 186).

Following the fireworks incident in Enschede, controls on the transport of fireworks were greatly intensified. Both the conclusions of the Oosting Committee and the inspection and test results carried out after the incident, showed up large-scale inaccuracies in the classification of fireworks. Studies by the Transport Inspectorate Netherlands (*IVW*) showed that, during the first half of 2001, more than half of the containers holding fireworks that were inspected had been incorrectly classified. The fireworks should have been classified in a higher risk group than was stated on the transport documents and hazard labels. The studies found that a significant proportion should have been classified under the highest hazard group (1.1), while the sender had classified the products in the lowest hazard group (1.4). On the basis of those findings, the minister advised the government and business, in a letter dated 20 June 2001, in the interests of safety, to treat all fireworks as belonging to hazard division 1.1. That advice formed the basis for the table contained in Article 5 of the policy rule issued on 19 June 2002.

During the second half of 2001, the infringement percentage relating to incorrect classification was much lower, i.e. 9% compared to the previous period during which it was 50%. Over the period from 1 January 2002 until now, the infringement percentage is 5%.

The municipality of Rotterdam and Dutch harbour managements lodged serious objections to the policy rule laid down on 19 June 2002. In response to their objections, a revised policy rule was brought into force. Its essence is that the starting point that was previously maintained, i.e. that all fireworks came under the highest hazard category (mass explosive, division 1.1) has been modified, easing restrictions on consumer fireworks in particular. Justification for this modification can be derived from the improvement in the classification of the fireworks imported, which was noted by enforcement operations. The modification is based on the fact, found in practice, that 50% of fireworks from division 1.4 are Roman candles and rockets, which should often, according to the default list (see Appendix 1), be deemed to be fireworks in division 1.3. Following application of the default list, it is assumed that 5% of the remaining fireworks from division 1.4 are deemed to be mass explosives. The required minimum distances from vulnerable objects, contained in the revised policy rule, are derived from the safety level that is applied for the storage of explosives in institutions (incidental peak overpressure 5 kPa). Therefore, the revised policy rule does not derogate from the general safety level aimed at for explosives.

Consultation on this revised policy rule took place with the municipality of Rotterdam, which agreed with the rule. Agreement was also reached between Rotterdam Municipal Port Management and the *IVW* concerning the further operationalisation of the use of Appendix 1 and on keeping it up to date in an efficient manner.

To support the implementation of this policy rule, topographical maps will be made available by the harbour masters, with which the distances of the berths from vulnerable objects can be measured.

This policy rule offers an interim policy. It prevents larger quantities of fireworks than is desirable from a safety perspective from being transported in sea-going vessels in Dutch waters. In addition, the policy rule provides clarity on the permitted quantities, so that both concerned parties and the harbour masters can enjoy a safe and workable situation.

The policy rule is applicable exclusively to the transport of fireworks and therefore not to other explosive substances.

The Transport Inspectorate Netherlands, Transport Division, Division Dangerous Goods and Counsel in the Hague (tel. + 31 70 30 52 444, fax. + 31 70 30 52 424) is responsible for the implementation of this policy rule.

Appendix 1: Default list for the classification of fireworks

Explanatory notes concerning the default list

The default list was developed by TNO/PML and is intended to be an enforcement instrument in the assessment of classification.

The standard classification is built upon a division into types of firework devices on the basis of calibre. UN classification tests carried out were partly aimed at determining the boundaries of the hazard divisions as a function of the calibre.

The results of the classification tests were used in developing the division into firework types. The information obtained in this way can be listed in a “standard classification”, i.e. a classification which, for reasons of safety, shall be maintained unless or until test results or a further assessment demonstrate that a different hazard division applies.

The list should also be regarded as an important tool in order to achieve the rapid and effective implementation of physical inspections.

In cases of serious doubt and on a random basis, the *IVW* Transport Division will open up packages and take samples. If there are fireworks involved that cannot be identified, this may result in classification based on desk-study, an analysis of the chemical composition and the conduct of UN classification tests.

The list referred to is also used in “storage inspections”, and will from time to time be supplemented in view of advancing insights.

Definitions

Calibre: the inside diameter of the tube (mortar) from which report shells and colour shells are projected. The shells themselves are of a slightly smaller diameter. For Roman candles, the calibre is the inside diameter of the tube.

Report shell: firework shell with a propellant charge and an effect charge, designed to be projected from a mortar barrel, the primary effect of which is a report.

Colour shell: firework shell with a propellant charge, bursting charge and effect charge, designed to be projected from a mortar barrel, the primary effect of the effect charge being visual (colour).

Cake: an assembled firework comprising a number of tubes, each with a firework charge (firework shell, Roman candle), which are fused in such a way that the individual tubes are ignited consecutively.

Roman candle: long tube filled with one or more effect charges, separated by a delay, which leads to a series of effect charges being fired into the air.

Rocket: firework device with rocket mechanism, with a propellant charge and effect charge.

Sparklers: rigid wire or thin stick, partially coated (along one end) with slow burning pyrotechnic composition, with or without an ignition tip.

Spinner: non-metallic tube or tubes containing gas or spark producing pyrotechnic composition, with or without noise producing compositions, with or without aerofoils.

Wheel: article with non-metallic tube or tubes containing pyrotechnic compositions and provided with a means of attaching it to a support, so that it can rotate.

Fireworks of limited danger: devices designed to produce very limited visible and/or audible effect, which contains only small amounts of pyrotechnic compositions.

Table 1: Standard Classification of Firework Devices

Name	Calibre	Standard classification
Report shell (spherical or cylindrical)	All	1.1
Colour shell	≥ 200 < 200	1.1 1.3
Cake (with as primary effect report)	All	1.1
Cake	All	1.3
Roman candle	≥ 50 (with as primary effect 'report') ≥ 50 < 50	1.1 1.2 1.3
Rockets	All	1.3
Rockets (with as primary effect report)	All	1.1
Sparklers	Pyrotechnic composition per sparkler ≥ 10 g	1.3 1.4

	Pyrotechnic composition per sparkler < 10 g	
Spinner	Pyrotechnic composition per spinner > 20 g	1.3
	Pyrotechnic composition per spinner ≤ 20 g	1.4
Wheel	> 60 g Pyrotechnic composition per tube	1.3
	≤ 60 g Pyrotechnic composition per tube	1.4
Fireworks of limited danger	All	1.4

- *All firework devices incorporating report shells have a default classification of 1.1.*
- *Devices that are a hybrid of colour shells and report shells, such as e.g. combination shells or double shells, should be treated as report shells.*
- *Where the above-mentioned definitions would include consumer fireworks, both professional and consumer fireworks shall apply in the relevant category.*

Appendix 2: Enforcement with respect to fireworks/explosive substances on board sea-going vessels

In conjunction with the admissibility policy on the transport of fireworks and/or explosive substances in sea-going vessels, a structured, transparent and easy-to-implement enforcement policy is required.

For sea-going vessels that intend to bring more than the quantities of fireworks/explosive substances contained in Article 13 of the Regulation for the Carriage of Dangerous Substances in Sea-going Vessels into the Netherlands, an exemption must be applied for from the Transport Inspectorate Netherlands, Transport Division, Section Market Regulation, Division Dangerous Goods and Counsel

Following assessment of the application, the *IVW* may decide to:

1. grant the application for exemption (a positive decision);
2. reject the application for exemption (a negative decision);
3. request additional information;
4. refuse to consider the application.

Several situations of infringement are possible, including the following:

- A. Failure to submit an application for exemption, followed by:
 - occupying a berth in a harbour that would not be permitted under the policy rule; and/or
 - entering Dutch waters.
- B. Negative decision/rejection of application followed by:
 - occupying a berth in a harbour that would not be permitted under the policy rule; and/or

- entering into Dutch waters (may be an infringement).

The departure point with respect to infringements is that the unlawful situation shall be brought to an end as quickly as possible. To achieve this, the following administrative or criminal law measures may be implemented:

1. preventing the sea-going vessel from entering Dutch waters;
2. directing the sea-going vessel, in consultation with the harbour authorities and the authority with competence over the environmental permit, to a berth that it would be permitted to occupy under the admission policy;
3. if 2 is impossible, the ship must leave Dutch waters;
4. make an official report on the situation.