



THE RAILWAY ASSOCIATION OF CANADA



CIRCULAR NO. DG-1

INSTRUCTIONS FOR THE SAFE HANDLING OF CARS
LOADED WITH DANGEROUS GOODS DELAYED IN TRANSIT ON
RAILWAY PROPERTY

Effective: June 30, 2005

Note: This update of the RAC Circular DG-1 is based on the "final draft" submitted to Transport Canada's TDG General Policy Advisory Council in February 2005 by the Working Group mandated to review and modify as required the Railway Association of Canada Circular DG-1. It should be noted that the Task Force report concluded that further consultation would be required regarding the issue of residue versus empty as the lower quantity limit. This Circular applies to loaded cars only.

1. GENERAL

These instructions apply to Cars loaded in bulk with dangerous goods that remain in excess of five (5) and no more than 30 sequential calendar days in the same designated site on railway property. The various classes and designators referred to are identified in the Transportation of Dangerous Goods Act and Regulations.

2. EXCEPTIONS

Cars loaded with Molten Sulphur UN 2448 and cars that have been emptied and that still contain residues of dangerous goods (identified on the shipping document as a residue) are not subject to these guidelines.

3. DANGEROUS GOODS TO BE MOVED AS EXPEDITIOUSLY AS POSSIBLE

The following must not be held in excess of five days:

- (a) Class 4.1 - PG I;
- (b) Class 4.3 - PG I;
- (c) Class 4.1 - PG II self-reactive substances that are temperature controlled;
- (d) Class 5.2 temperature controlled substances;

With respect to these dangerous goods, where non-daily train service exists, consignments shall be forwarded on the first available train.

- *Expedientiously means no longer than 48 hours.*

4. RADIOACTIVE MATERIALS AND EXPLOSIVES

Cars loaded with Class 1 Explosives or Class 7 radioactive materials must be moved as expeditiously as possible. Railway and/or local police must coordinate additional security for Cars loaded with Class 1 Explosives that are held in excess of 48 hours.

5. SITE SELECTION RESPONSIBILITY

An appropriately trained railway officer, such as a Risk Management, Dangerous Goods and/or Environmental Officer, after consultation with the local fire department, shall be designated to select tracks to be used to hold Cars containing dangerous goods that remain in a location in excess of five (5) calendar days.

The railways shall implement the processes identified herein:

- A. Prepare a site specific Emergency Plan. The Emergency Plan shall be based on a standard template (appendix #1), and require consultation with the local fire department and/or police department.
- B. Annual updates should be provided, with names and contacts revised as required.
- C. Any material change in the site shall require an updated plan.
- D. Provide a list of approved sites and a copy of the Emergency Plan to the Clerk of the municipality by registered mail or confirmed electronic communication (municipality meaning local jurisdiction/authority). The notification shall include the current approved clearance distances and advice to the municipality on the possible consequences of allowing development or re-development of any properties within the clearance distances.

6. PRIMARY SELECTION CRITERIA

A dangerous goods holding track shall be located at least the following distances from residences and places of assembly such as schools, hospitals, recreation centres, and so on:

Classification	Distances
1 (except 1.4)	500 metres
1.4	100 metres
2.1	100 metres
2.2	50 metres
2.3 (anhydrous ammonia, UN 1005)	250 metres
2.3 (chlorine)	450 metres
2.3	250 metres
3	50 metres
4	100 metres
5.1	50 metres
5.2	100 metres
6	100 metres
7	50 metres
8	100 metres
9	50 metres

If the distances specified cannot be attained, a visual walk-around ground level inspection shall be performed every 24 hours.

The separation distance of a holding track from a mainline is:

Class 1, 2, 3, 6 and 7	Class 4, 5, 8, and 9
15 metres	8 metres

7. ADDITIONAL SELECTION CRITERIA

In selecting the holding track, consideration should be given to the proximity to:

- a) busy highways
- b) bridges and overhead highway structures;
- c) power lines, transformers, underground gas lines or other sources of ignition;
- d) environmentally sensitive areas and/or conditions including inland waters and water area with marine life;
- e) fueling and repair facilities;
- f) roadways to provide easy access for inspections and emergency response;
- g) an emergency water source;
- h) occupied boarding cars; and
- i) an active main line.

8. MAINTENANCE AND USE OF HOLDING TRACKS

Any combustible materials such as vegetation, litter and/or sources of ignition including smoking, the use of welding or other equipment with an open flame, the use of tools generating sparks, or other fires hazards shall not be less than 8 metres from the centerline of the track where cars containing flammable gases, flammable liquids or explosives are being held.

10. INSPECTION

Railways must provide or make arrangements to provide a visual walk-around inspection every 48 hours after the fifth day cars have been held to ensure there is no loss of containment. The inspection shall be performed by any person who is trained or under the direct supervision of a person who is trained under the Transportation of Dangerous Goods Regulations, knows where to look for loss of containment and if found, knows who to contact for immediate remedial action, if necessary.

- A. The inspection record shall be identified as "Cars Inspected as per RAC Circular DG-1" and include the time, date, location, track, initials or name of inspector and car number.
- B. The record of the walk around inspection must be kept for a period of 2 years for audit purposes.
- C. Checks should include audible and visual indications of loss of containment.

Appendix #1
Standard template
Site Specific Emergency Plan

Emergency Plan information for **(name or railway)** Railway
Property in the Municipality of
_____ used for the safe
handling of cars loaded with dangerous goods delayed in
transit.

Provided in Accordance with the Railway Association of Canada
Circular No. DG-1 *"Instructions for the Safe Handling of Cars
Loaded with Dangerous Goods Delayed in Transit on Railway Property"*

Last updated June 15, 2005 - RAC TDG Committee

As part of the railway's commitment to working with our community partners, this Site Specific Emergency Plan is provided to communities to advise them of the criteria used to minimize the possibility of incidents involving cars loaded with dangerous goods that may be delayed in transit in the community.

The (NAME of RAILWAY) has developed detailed Emergency Response Plans for all our operations. This plan provides information specific to the site of our operations in your municipality where dangerous good cars may be found from time to time as a result of delays in movement to the final destination.

1. In accordance with RAC Circular DG-1 this information is directed to the Clerk of the municipality for distribution to appropriate parties / agencies. Please provide a copy of this plan to the Fire Chief of your Fire Department and / or your municipal Emergency Planning official, to assist them in developing appropriate responses to possible incidents at this site.

2. An annual update of this plan will be provided, with names and contacts for responsible railway staff, revised as required.

To: _____

Date: _____

Name of the railway: _____

Railway contact name: _____

Phone: _____

Railway Emergency Phone Number: _____

Location: _____ Province: _____

Yard: _____ Track(s): _____

Clearance distance met (Y/N) _ (As per PRIMARY SELECTION CRITERIA - Item 6 of RAC Circular DG-1)

Comments:

