

RAILWAY LOCOMOTIVE  
INSPECTION AND SAFETY  
RULES

# **RAILWAY LOCOMOTIVE INSPECTION AND SAFETY RULES**

## **CONTENTS**

### **PART I - GENERAL**

1. Short Title
2. Scope
3. Definitions
4. Railway Company Responsibility
5. Application of Safety Inspections and Movement Restrictions
6. Certified Locomotive Inspector
7. Safety Inspection Locations
8. Pre-Departure Inspection
9. Captive Service

### **PART II - LOCOMOTIVE DESIGN REQUIREMENTS**

10. General Design
11. Audible Signals
12. Event Recorders
13. Safety Control Equipment
14. Safety Appliances
15. Spark Arresting Devices
16. Illuminating Devices
17. Safety Glazing
18. Fail Safe Circuits and Systems
19. Fuel Tanks
20. Wheels and Axles

### **PART III - LOCOMOTIVE INSPECTION REQUIREMENTS**

21. Brake System
22. Trucks
23. Wheels and Axles
24. Draft Systems
25. Fuel Tanks
26. Internal Combustion Engines
27. Rail Clearance
28. Windows
29. Safety Control Equipment
30. Safety Appliances
31. Speed Indicators
32. Event Recorders

- 33. Audible Signals
- 34. Illuminating Devices

**PART IV - LOCOMOTIVE FILING REQUIREMENTS**

- 35. Filing Requirements with the Department
- 36. Exception

**PART V - STEAM LOCOMOTIVES**

- 37. Steam Locomotives

**APPENDIX I - Pre-Departure Inspection by a Locomotive Operator or Other Qualified Person**

**APPENDIX II - Locomotive Specifications**

## **PART I - GENERAL**

### **1. SHORT TITLE**

1.1 For ease of reference, these rules may be referred to as the “Locomotive Safety Rules”

### **2. SCOPE**

2.1 These rules prescribe the minimum safety standards for locomotives operated by railway companies subject to the jurisdiction of Transport Canada pursuant to the Railway Safety Act.

### **3. DEFINITIONS**

In these rules:

- 3.1 a) “bad order” means a locomotive having a defect as defined in Part III of these rules;
- b) “bad order information system” means any method, computerized or otherwise, by which a railway company controls and protects the movement of a locomotive with defects;
- 3.2 “break” means a fracture resulting in complete separation into parts. The term “break” and “broken” are used interchangeably in these rules;
- 3.3 “candela” means the unit of luminous intensity of a light source;
- 3.4 “captive service” means when a locomotive(s) is in service exclusively between specified points on one railway company, in a given geographic location for a given period of time; which does not pass through a safety inspection location;
- 3.5 “certified locomotive inspector” means a person whom is qualified to perform safety inspection of locomotives pursuant to subsection 6.1
- 3.6 “certified safety glazing material” means a glazing material that has been certified by the manufacturer as having met the testing requirements that is equivalent to, or exceeds North American standards;
- 3.7 “certificate” means a document that identifies the employee and the task(s) for which such employee is certified.
- 3.8 “cracked” means fractured without complete separation into parts;
- 3.9 “dBA” means an abbreviated symbol for a sound level measured on the “A” weighted slow response scale of a sound level meter;

- 3.10 “Department” means the Department of Transport;
- 3.11 “designated service” means operation of a locomotive exclusively under conditions where it:
- (a) is not used as an independent or controlling unit in the lead position except within a single yard area;
  - (b) is not occupied by an employee when the locomotive is moving from one yard area to another, and;
  - (c) has stencilled or posted in the locomotive cab the words, “To be occupied in Designated Service only”;
- 3.12 “fire season” means the period of time from April 1<sup>st</sup> to October 31<sup>st</sup>;
- 3.13 “in service” means all locomotives except those which are:
- a) “bad order” and/or being moved to another location for repair(s) as provided in 5.2 of these rules
  - b) in a repair shop or on a repair track;
  - c) on a storage track and are dead and drained;
- 3.14 “locomotive or engine” means a rail vehicle propelled by any energy form, other than steam, intended for the propulsion and/or control of freight, passenger or service equipment. The term locomotive and engine are used interchangeably in these rules;
- 3.15 “locomotive consist” means a combination of locomotives operated from a single control;
- 3.16 “operative” means a component or system is in a safe condition to perform its intended function;
- 3.17 “person in charge” means a certified person in accordance with subsection 6.1, appointed by a railway company to ensure the safe conduct of an operation or the work of employees;
- 3.18 “qualified person” means, in respect to a specified duty, a person who, because of knowledge, training and experience is qualified to perform that duty safely and properly;
- 3.19 “railway company” means a railway company subject to the Railway Safety Act;
- 3.20 “railway safety inspector” means a Department of Transport inspector designated pursuant to section 27 of the Railway Safety Act;
- 3.21 “safety control” means a device(s) which will cause a brake application to be initiated automatically if the locomotive operator becomes incapacitated;

- 3.22 “safety defect” means any item or component that is defective on a locomotive as prescribed in Part III of these Rules;
- 3.23 “safety inspection” means an examination of a locomotive for safety defects while stationary by a certified locomotive inspector or a person in charge as defined herein, to verify that it may move safely, and to identify those defects listed in Part III of these rules which may inhibit such movement and require correction. Safety inspections are intended to be of a visual nature;
- 3.24 “safety inspection location” means a location designated by a railway company where certified locomotive inspector perform safety inspections;
- 3.25 “safety inspection record” means a record in hard copy form or otherwise, including a computer record, which attests that a safety inspection as defined herein was performed;
- 3.26 “train” means locomotive(s), with or without cars, so designated by its operating authority, displaying marker(s);
- 3.27 “yard service” means locomotives involved exclusively in switching, marshalling, humping, trimming and industrial switching.

#### **4. RAILWAY COMPANY RESPONSIBILITY -**

- 4.1 A railway company is responsible for the inspection and repair of all locomotives to ensure safe operation. All components, appurtenances and control apparatuses of all locomotives must be designed and maintained to perform their intended function.
- 4.2 A railway company shall reply in writing or by acceptable electronic means, within fourteen (14) days, to the department’s regional office concerned, on the corrective action taken to correct a violation/defect reported by a railway safety inspector. The reply, from an appropriate railway officer, shall also include the unit initials and number and the date and location of the corrective action taken.

#### **5. APPLICATION OF SAFETY INSPECTIONS AND MOVEMENT RESTRICTIONS -**

- 5.1 A railway company shall ensure that locomotives placed or continued in service are free from all safety defects described in Part III of these rules;
- 5.2 Locomotives identified with safety defects may be moved to a designated location for repair, when authorized by a person in charge, who shall ensure that:
- (a) the locomotive is safe to move; (in operating or dead head mode in the direction of travel)

- (b) a means to protect the locomotive's safe movement is implemented, including, identifying to all employees involved the defects which restrict the locomotive(s) movements, the designated location for repair and the name of the person in charge authorizing the movement; and,
- (c) the movement of a locomotive with safety defects shall be controlled and protected by the use of a bad order information system, the appropriate records will be retained for a period of ninety two (92) days.

## **6. CERTIFIED LOCOMOTIVE INSPECTOR**

- 6.1 A railway company shall ensure that certified locomotive inspectors are trained to perform safety inspections of locomotives in compliance with these Rules. Certified locomotive inspectors must demonstrate to a railway company by means of oral or written examination and on-the-job performance, a knowledge and ability concerning safety inspection of railway locomotives.
- 6.2 A railway company shall maintain a record of certified locomotive inspectors who perform safety inspections. This record shall be made available to a railway safety inspector upon request.
- 6.3 Certified locomotive inspectors shall be recertified if they have not been performing the duties prescribed in these rules for a period extending over three years.

## **7. SAFETY INSPECTION LOCATIONS**

- 7.1 A railway company shall file with the Department a list of its safety inspection locations. Any changes to the list of safety inspection locations shall be filed with the Department sixty (60) days prior to implementing such changes.
- 7.2 At safety inspection locations:
  - a) all locomotives placed in service or placed on a train for freight service only shall receive a safety inspection
  - b) all locomotives on a train for the purpose of passenger use only placed in service or laid over for more than eight (8) hours shall receive a safety inspection.
- 7.3 A railway company shall maintain a record of all locomotives which received a safety inspection. This information will be retained for a minimum of ninety two (92) days and will be made available to a railway safety inspector upon request
- 7.4 At safety inspection locations, locomotives operating in "yard service" or "designated service" shall receive a safety inspection at intervals not exceeding ten (10) days.

7.5 At those locations, prior to departure of a train where locomotive(s) receiving a Safety Inspection have been placed in service or placed on a train, the locomotive operator shall be notified that a Safety Inspection has been made. Such notification shall include any information required for movement of safety defects as provided in Section 5.2 of these Rules.

## **8. PRE-DEPARTURE INSPECTION**

8.1 At locations other than Safety Inspection Locations, where a locomotive is placed in service, or a locomotive layover of more than 8 hours has occurred, the locomotive shall, as a minimum requirement have a pre-departure inspection by either the locomotive operator or other qualified person for those conditions listed in Appendix I

8.2 The locomotive operator shall be responsible for determining that the prescribed inspection has been completed prior to departure.

8.3 At locations other than Safety Inspection Locations all operating locomotives shall receive a safety inspection at intervals not exceeding forty five (45) days.

## **9. CAPTIVE SERVICE**

9.1 Section 7.1 of these rules do not apply to locomotives used exclusively in captive service if a railway company:

- (a) establishes safety inspection criteria, and;
- (b) files railway schedules with the department that specify the locations of the captive service, and the applicable inspection criteria imposed on such locomotive(s), thirty (30) days prior to operation.



## **PART II - LOCOMOTIVES DESIGN REQUIREMENTS**

### **10. GENERAL DESIGN**

10.1 The locomotive shall be designed and constructed to provide for safe operation and protection of the operating crews and property from accidents caused by functional failure of locomotives.

#### 10.2 (a) Freight Locomotives

New locomotives shall be designed and constructed as a minimum in accordance with the latest revision of the “Association of American Railroads Manual of Standards and Recommended Practices” (S-580) or to an equivalent standard to provide for safe operation and for the protection of operating crews, and property from accidents caused by functional failure of locomotives. Such standard shall be kept on file by the railway company and made available to the Department upon request. (Appendix II)

#### (b) Passenger Locomotives

New locomotives shall be designed and constructed as a minimum in accordance with the latest revision of the “American Public Transit Association” (APTA), the Association of American Railroad Manual of Standards and Recommended Practices or equivalent standard.

10.3 Passageways and walkways shall be properly treated with anti-skid decking to provide secure footing.

10.4 A locomotive consist with open end platforms shall have a means of safe passage between them. There shall be a continuous barrier across the full width of the end of a locomotive or a continuous barrier between locomotives.

### **11. AUDIBLE SIGNALS**

11.1 Locomotives other than in designated service operating in a controlling position shall be equipped with a horn that is tuned in chords of not less than three tones meeting the following design criteria:

- (a) must produce a minimum sound level of 96 dBA at any location on an arc of 30.5 metres (100 feet) radius subtended forward of the locomotive by angles 45 degrees to the left and to the right of the centreline of the track in the direction of travel;
- (b) the control of the horn shall be located to allow for convenient operation from the locomotive operator’s normal operating location.

- 11.2 Locomotives operating in a controlling position shall be equipped with a bell, or other device capable of producing an equivalent sound meeting, the following design criteria:
- (a) must produce a minimum sound level of 60 dBA at any location on an arc of 15.25 metres (50 feet) radius subtended forward of the locomotive by angles 45 degrees to the left and to the right of the centreline of the track in the direction of travel;
  - (b) the control of the bell shall be located to allow for convenient operation from the locomotive operator's normal operating location.

## **12. EVENT RECORDERS**

- 12.1 Controlling locomotives other than in designated and/or yard service, shall be equipped with an event recorder meeting the following minimum design criteria:
- (a) the event recorder shall record the time, the distance, the speed, the brake pipe pressure, the throttle position, the emergency brake application, the independent brake cylinder pressure, the horn signal and Reset Safety Control function;
  - (b) the event recorder shall retain a minimum of five minutes of data preceding a collision or derailment;
  - (c) the event recorder shall have suitable means to transfer the stored data to an external device for processing and analysis

## **13. SAFETY CONTROL EQUIPMENT**

- 13.1 Controlling locomotives must be equipped with a safety control system which shall, as a minimum, initiate a full service brake application and remove all tractive effort in the event that the person operating the locomotive becomes inattentive or incapacitated.

## **14. SAFETY APPLIANCES**

- 14.1 Safety appliances on locomotives shall be in compliance with General Order No. 0-10, "Regulations Respecting Railway Safety Appliance Standards".

## **15. SPARK ARRESTING DEVICES**

- 15.1 Locomotives shall be equipped with a spark arresting device or a turbo-charger.

## 16. ILLUMINATING DEVICES

16.1 Locomotives operating in a leading position shall be equipped with headlight(s) meeting the following design criteria

- (a) must be equipped with a minimum of one headlight that produces at least 200,000 candela;
- (b)
  - i headlight(s) on locomotives other than in designated service must be aligned to centreline in the horizontal plane and depressed in the vertical plane to strike the rail at 244 metres (800 feet) ahead of the locomotive in the direction of travel;
  - ii headlight(s) on designated or yard service locomotives must be aligned to centreline in the horizontal plane and depressed in the vertical plane to strike the rail at 91.5 metres (300 feet) ahead of the locomotive in the direction of travel;
- (c) headlight(s) must be provided with a dimming device that reduces normal operating voltage in nominally 50%. The control of such device must be located to allow for convenient operation from the locomotive operator's normal operating location;
- (d) locomotives must be equipped with a rear headlight or have an illuminating device to provide for a safe switching operation.

16.2 Leading locomotives, other than in designated and/or yard service, must be equipped, in the direction of travel, with ditch lights or a suitable alternative that is filed with the Department meeting the following design criteria;

- (a) must be equipped with two ditch lights in the direction of travel, each of which produces at least 200,000 candela;
- (b)
  - i ditch lights must be mounted at least 91.5 cm (36 inches) above the top of rail. They shall be spaced a minimum of 91.5 cm (36 inches) apart, unless the vertical distance between the headlight and the ditch light center lines is less than 152.5 cm (60 inches), in which case the ditch lights must be spaced at least 152.5 cm (60 inches) apart;

- ii diesel multiple units, electric multiple units and control cab cars are exempted from the mounting height requirement in paragraph [(b)i] where such placement would compromise the integrity of the car body or be otherwise impracticable. In such cases ditch lights must be mounted at least 61 cm (24 inches) above the top of rail;
  - (c) ditch lights shall be aligned in the horizontal plane to cross the locomotive centreline 122 metres (400 feet) ahead of the locomotive and depressed in the vertical plane to strike the rail at 244 metres (800 feet) in the direction of travel.
- 16.3 Locomotives operating in a controlling position must be equipped with means of illuminating the control instruments, meters and gauges to enable the locomotive operator to make accurate readings from the normal operating location without interfering with the operator's vision of track and signals.

## **17. SAFETY GLAZING**

- 17.1 Locomotives, other than in designated service, must be equipped with certified safety glazing material on all windows of the operating and/or occupied cabs.

## **18. FAIL SAFE CIRCUITS AND SYSTEMS**

- 18.1 Any component of electrical or mechanical systems, vital to the safety of locomotive occupants or the general public, shall in the case of failure retain the locomotive in a safe operating condition.

## **19. FUEL TANKS**

- 19.1 Fuel tanks, on new locomotives purchased subsequent to the approval of this rule, are to be of high impact resistant design which meet or exceed current Association of American Railroads Manual of Standards and Recommended Practices (S-5506).
- 19.2 Fuel tanks shall be provided with suitable liquid level gauges, so located that the fuel level in the tanks can be determined when the tanks are being filled. Gauges must be protected against accidental breakage where loss of fuel would be incurred.

## **20. WHEELS AND AXLES**

- 20.1 Traction motors support bearing, on new locomotives purchased subsequent to the approval of this rule, are to be of the roller bearing type.

## **PART III - LOCOMOTIVE INSPECTION REQUIREMENTS**

### **21. BRAKE SYSTEM**

- 21.1 The brake system and all related components, including the handbrake, must be tested and maintained in operative condition as per procedures issued by the railway company and filed with the Department.

### **22. TRUCKS**

- 22.1 A railway company shall not place, or continue in service, a locomotive with any of the following truck related defects:
- (a) truck frames, swing hangers, swing hanger pins or equalizers cracked or broken;
  - (b) suspension components such as coil or rubber springs, elliptic springs, snubbers and dampers must not be missing, cracked, broken or out of place and must be properly secured.
- 22.2 All components attached to the truck frames must be properly secured.
- 22.3 The bolster side bearing and pedestal clearances shall be maintained within manufacturer's specifications.
- 22.4 The truck frame, brake rigging and associated components of locomotives shall be kept free from accumulation of oil, grease and other combustible materials.

### **23. WHEELS AND AXLES**

- 23.1 A railway company shall not place, or continue in service, a locomotive with any of the following wheel defects:
- (a) flange thickness of 7/8 inches (22.2 mm) or less;
  - (b) vertical flange of 1 inch (25.4 mm) or more;
  - (c) a flange height of 1 ½ inches (38.1 mm) or more measured from tread to the top of the flange;
  - (d)
    - i) a curved plate wheel with a rim thickness of 1 inch (25.4 mm) or less;
    - ii) a straight plate wheel with a rim thickness of 1 inch (25.4 mm) or less;

- iii) a straight or curved plate wheel with a rim thickness of 3/4 inch (19.0 mm) or less, on locomotives used in yard services
  - (e) a flat spot of 2 ½ inches (63.5 mm) or more in length or, in the case of multiple flat spots, 2 inches (50.8 mm) or more in length;
  - (f) a gouge or chip in the flange that is more than 1 ½ inches (38.1 mm) in length and ½ inch (12.7 mm) in width;
  - (g) a shell of 2 ½ inches (63.5 mm) or more in length or, in the case of multiple shells, 2 inches (50.8 mm) or more in length;
  - (h) tread worn hollow 5/16 inch (7.9 mm) or more;
  - (i) a crack in the rim, plate or hub;
  - (j) a loose wheel;
  - (k) the variation in the circumference of wheels may not exceed ¼ “ or 2 tapes on the same axle when applied or threaded.
- 23.2 A railway company shall not place or continue in service a locomotive with a traction motor support bearing that shows evidence of:
- (a) signs of overheating;
  - (b) loose or missing bolts;
  - (c) oil leaking from reservoir;
  - (d) missing or defective reservoir filler cup, or drain plug not properly secured.
- 23.3 A railway company shall not place or continue in service a locomotive with any of the following journal bearing safety defects:
- (a) a loose or damaged seal;
  - (b) loose or missing end cap bolt;
  - (c) signs of over heating; and
  - (d) a missing or defective gasket or drain plug not properly secured.

## 24. DRAFT SYSTEMS

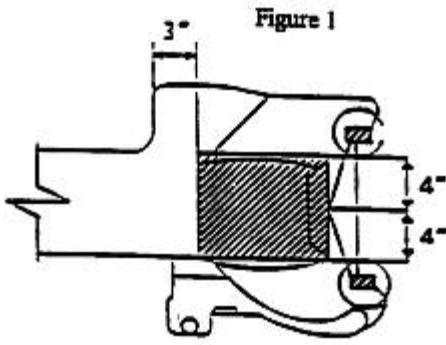
24.1 A railway company shall not place or continue in service a locomotive with any of the following coupler related defects:

- (a) a coupler shank that is bent out of alignment to the extent that the coupler will not couple automatically;
- (b) a coupler knuckle that is broken or cracked on the inside pulling face of the knuckle, except that shrinkage cracks or hot tears that do not significantly reduce the strength of the knuckle shall not be considered cracked;
- (c) a knuckle pin or thrower that is missing or inoperative;
- (d) a coupler retaining pin lock that is missing or broken;
- (e) a coupler with an inoperative lock lift or a coupler assembly that does not have anticreep protection to prevent unintentional unlocking of the coupler lock; locomotives in passenger service must be equipped with a device that locks the lock lift assembly to ensure prevention of unintentional uncoupling;
- (f) a coupler lock that is missing, inoperative, bent, cracked or broken;
- (g) a coupler not falling within the following heights above the rails, (except those by design and of which specifications will be filed with the Department):

minimum height: 31 ½ inches (800 mm)

maximum height: 34 ½ inches (876 mm)

- (h) a coupler that has a crack in the area of the shank or head represented by the unshaded portion of figure 1, except that shrinkage cracks or hot tears that do not significantly reduce the strength of the coupler shall not be considered cracked;



- (i) an inoperative uncoupling device.

24.2 A railway company shall not place or continue in service a locomotive with a draft arrangement that shows evidence of:

- (a) a draft gear that is inoperative;
- (b) a cracked or broken yoke;
- (c) a vertical coupler pin retainer that is missing or defective
- (d) a draft gear carrier plate that is missing or has more than 25% of the fasteners loose or missing;
- (e) a draft stop that is missing or broken to the extent that it no longer performs its design function.



## **25. FUEL TANKS**

- 25.1 Exterior of fuel tanks of the locomotive shall be kept free from accumulation of oil, grease and other combustible material.
- 25.2 Fuel tanks, filling adapters, pumps, piping, valves and connections shall be kept free from leaks, properly secured and in operative condition.
- 25.3 The fuel tank vent must be kept clear of obstructions.

## **26. INTERNAL COMBUSTION ENGINES**

- 26.1 The engine and engine room shall be kept free from accumulation of oil, grease, fuel oil, and other combustible material. Pollution control tanks shall be kept free from leakage and/or from overflow.
- 26.2 Locomotives operated in service during the fire season, shall have exhaust passages on the discharge side of spark arresting devices or turbo-chargers kept free of oil accumulation and carbonaceous deposits in excess of 1/8 inch (3 mm) in thickness.

## **27. RAIL CLEARANCE**

- 27.1 No part or appliance of a locomotive, excepting wheels and flexible non metallic sand pipe extension tips, shall be less than 2 ½ inches (63 mm) above the top of the rail.

## **28. WINDOWS**

- 28.1 Windows on controlling locomotives, shall be kept clean and free from cracks or obstructions. All related components, on controlling locomotives, such as wipers, sun visors and defrosters shall be kept in operative condition.

## **29. SAFETY CONTROL EQUIPMENT**

- 29.1 A controlling locomotive shall not be placed in service other than in designated and/or yard service, without an operative reset safety control.
- 29.2 A controlling locomotive in designated and/or yard service which is not equipped with a reset safety control shall have an operative safety control foot pedal.

**30. SAFETY APPLIANCES**

30.1 All safety appliances, as described in General Order No. O-10, "Regulations Respecting Railway Safety Appliance Standards" shall be kept in a safe and operative condition.

**31. SPEED INDICATOR**

31.1 A controlling locomotive shall not be placed in service other than in designated service without operative speed indicator(s).

**32. EVENT RECORDER**

32.1 A controlling locomotive shall not be placed in service other than in designated and/or yard service without an operative event recorder.

**33. AUDIBLE SIGNALS**

33.1 All audible signal equipment on controlling locomotives shall be in operative condition.

**34. ILLUMINATING DEVICES**

34.1 All illuminating devices shall be secured and be in operative condition.

## **PART IV - LOCOMOTIVE FILING REQUIREMENTS**

### **35. FILING REQUIREMENTS WITH THE DEPARTMENT**

- 35.1 A railway company shall maintain specification records for each of its locomotives. These records shall be made available to the Department upon request. (Appendix II)
- 35.2 A railway company shall retain on file and provide to the Department upon request the following safety guidelines and procedures as amended:
- (a) event recorder functional specifications and design criteria;
  - (b) design specifications for the configuration of speed indicators and cab speakers on passenger locomotives;
  - (c) specifications for couplers not falling within the following heights above the rails:  
  
minimum height - 31 ½ inches (800 mm)  
maximum height - 34 ½ inches (876 mm)
  - (d) testing procedures for reset safety control systems
  - (e) method of testing window and door safety glazing
  - (f) testing procedures for audible signals
- 35.3 A railway company shall file with the Department an annual report, or as otherwise requested from a railway safety inspector, information concerning locomotives set off from a train enroute because of suspension bearing failure, and/or other equipment failures identified by equipment fault detection devices located along a railway system.
- 35.4 A railway company if requested, shall file with the Department a full description of the training program and criteria used
- (a) to perform safety inspections, and;
  - (b) to perform pre-departure inspections in accordance with Appendix 1.
- 35.5 A railway company may operate locomotives with advanced technology/operational improvements provided that the testing and operating procedures have been filed with the Department thirty (30) days prior to testing and placing in service.

**36. EXCEPTION TO THE APPLICATION OF THESE RULES**

36.1 These Rules do not apply to locomotives used exclusively in tourist excursion train service that travels no further than a round trip of 150 miles (240 km) at a speed not exceeding a maximum of 25 mph (40 km/h) if the company uses these rules as a guide and consults with the Department to:

- (a) establish appropriate inspection, safety criteria and speed restrictions for locomotives used exclusively in tourist trains; and
- (b) files railway schedules with the department that specify the locations of the service, the round trip distance, the type of equipment operated, along with the applicable inspection, safety criteria, and any other restrictions imposed on the operation of such equipment, ninety (90) days prior to operation.

## **PART V - STEAM LOCOMOTIVES**

### **37. STEAM LOCOMOTIVES**

- 37.1 For the purpose of Part V, a “locomotive or engine” means a self-propelled unit of equipment, powered by steam that is either designed or used for moving other equipment. This includes a self-propelled unit designed or used to carry freight and/or passenger traffic.
- 37.2 Steam powered locomotives shall be inspected and maintained in accordance with RAC Steam Locomotive Safety Inspection Circular No. MC 3.
- 37.3 Each railway company which operates, or intends to operate, steam powered locomotives shall:
- (a) notify Department at least thirty (30) days in advance of the first date of such operation, and
  - (b) notify the Department in advance of any periodic inspections, as required in RAC Circular No. MC 3.

## APPENDIX I

### **PRE-DEPARTURE INSPECTION BY A LOCOMOTIVE OPERATOR OR OTHER QUALIFIED PERSON**

As per subsection 8.1, a pre-departure inspection of locomotive(s) shall be performed by the locomotive operator or other qualified person for the following:

- (a) brake test including the operation of the safety control system;
  - (b) hand brake;
  - (c) headlights and ditch lights;
  - (d) trucks and running gear;
  - (e) any other apparent safety hazard likely to cause an accident or casualty.
2. Exceptions are to be reported for correction.

**APPENDIX II**

**LOCOMOTIVE SPECIFICATION RECORDS**

A railway company shall maintain specification records, as referenced in the “Locomotive Safety Rule, Part IV”, for each of its owned or leased locomotives. This information will be made available to the Department upon request;

A railway company shall retain records of any alternations which affect data recorded;

Loco Number \_\_\_\_\_ Loco Initial \_\_\_\_\_ Loco Type \_\_\_\_\_ Loco Propulsion \_\_\_\_\_

Operating Railway \_\_\_\_\_ Built By \_\_\_\_\_ Date \_\_\_\_\_

Number and type of traction motors \_\_\_\_\_

Engine, type and horsepower \_\_\_\_\_

Locomotive brake equipment type \_\_\_\_\_

Dynamic Brake :Yes \_\_\_\_\_ No \_\_\_\_\_ Type \_\_\_\_\_

Type of safety control system \_\_\_\_\_

Event Recorder: Yes \_\_\_\_\_ No \_\_\_\_\_ Type \_\_\_\_\_

Anti-climber arrangement designed to withstand a minimum of \_\_\_\_\_ pounds

Collision posts designed to withstand a longitudinal force of \_\_\_\_\_ pounds each at 30 inches above the deck and \_\_\_\_\_ pounds at the underframe.

Short hood structured-facing area skin is equivalent to \_\_\_\_\_ steel plate psi yield strength.

Total weight in working order \_\_\_\_\_ pounds

Starting tractive effort at \_\_\_\_\_ % adhesion \_\_\_\_\_ pounds

AAR requirement for fuel tanks \_\_\_\_\_

Pilot Type \_\_\_\_\_ Front \_\_\_\_\_ Rear \_\_\_\_\_