

INDUSTRIAL RAILWAY CIRCULAR NO. - 3

GUIDELINE FOR THE LONG TERM STORAGE OF LAST CONTAINED DANGEROUS GOODS TANK CARS

Definitions

“LACTAC” means – Last Contained Dangerous Goods Tank Car

“Inspections” means – a periodic inspection of the tank cars to ensure there is no leakage / venting of dangerous goods, the tank cars are secured to prevent non-intended movement and the safety appliances have not been compromised.

“Long term storage” means – a LACTAC that is stored as is indicated in Section 7 - Inspections.

“Operating approval” means – industrial railway operating approval as required by *the Railway (Alberta) Act*.

GENERAL

This guideline applies to a company under the jurisdiction of the *Railway (Alberta) Act* that intends to store tank cars long term that last contained dangerous goods.

The various classes referred herein are identified in the [Transportation of Dangerous Goods Regulations](#).

1. EXCEPTIONS

Class 1, 6.2 and 7 materials are not covered in this guideline and must not be stored in a long term storage yard that is under the jurisdiction of Alberta Transportation.

2. REGULATORY REQUIREMENTS

The [Industrial Railway Regulations](#) outline specific requirements for railway operations.

Schedule 1	Operating Rules
Schedule 2	Locomotive Inspection and Safety Rules
Schedule 3	Rail Car Mover Inspection and Safety Rules
Schedule 4	Freight Car Inspection and Safety Rules
Schedule 5	Rules Respecting Track Safety
Schedule 6	Crossing Rules
Schedule 7	Transfer of Dangerous Goods Rules
Schedule 8	Employee Qualification Standards
Schedule 9	Safety Critical Positions Rules
Schedule 10	Medical Rules for Positions Critical to Safe Operations

3. NOTIFICATION / SITE SELECTION

Notification

The Alberta Government requires railways under the jurisdiction of the [Railway \(Alberta\) Act](#) that intend to connect railway track to a service provider or to construct railway works, to have approval from the Railway Administrator prior to starting construction.

More information can be found in the [Intent to Construct New Industrial Track](#) Notification requirements document.

Railways with operating approvals that wish to store LACTAC's long term must receive approval from the Railway Administrator.

Site Selection

Site selection must be conducted in accordance with section 5, and 6 of this Circular.

If the criteria in section 5 and 6 cannot be met, an exemption application may be made to the Railway Administrator. An equivalent level of safety must be shown.

4. PRIMARY SELECTION CRITERIA

A dangerous goods long term storage track must not be located less than the noted distances from commercial establishments, residences and other places of assembly such as schools, hospitals or recreation centres.

Classes and Specific Distances

Class		Distance
2.1	Flammable gases	450 meters for all classes
2.2	Inert gases	
2.3	Toxic gases	
3	Flammable Liquids	
4.1	Flammable Solids	
5.1	Oxidizing substances	
6.1	Toxic substances	
8	Corrosives	
9	Miscellaneous	

5. ADDITIONAL SELECTION CRITERIA

Where possible, a LACTAC facility should be:

- Located away or protected from busy highways,
- Not located under a bridge or an overhead highway or commuter rail structure,
- Located away from power lines, transformers, underground gas lines or other sources of ignition,
- Located away from sensitive areas of the environment such as sensitive inland waters, including sewer openings,
- Located away from fuelling or repair facilities,
- Located adjacent to a roadway in order to provide easy access for inspections and emergency response,
- Located near an emergency water source,
- Have portable spill trays or other containment devices that will collect any product that may leak,
- Located on a site that offers natural containment to negate spill runoff, and
- Have suitable and maintain railway infrastructure in a condition that meets or exceeds the *Alberta Industrial Railway Rules Respecting Track Safety*.
- Site storage track must have sufficient space between tracks to allow emergency vehicles to be able to access both sides of the LACTAC.

6. APPROVALS

A company that does not have a current industrial railway operating approval required by the *Railway (Alberta) Act* that intends to store LACTAC must obtain an Industrial Railway Operating Approval from the Railway Administrator prior to the start of railway operations.

Companies that are current holders of an operating approval for a non-dangerous goods transfer site that wish to add LACTAC storage must notify the Railway Administrator.

Companies that are current holders of an operating approval for dangerous goods transfer site that wish to add LACTAC storage must notify the Railway Administrators for approval.

By authority of the Act, the Railway Administrator can request any information deemed appropriate in order to decide whether to grant an approval for an operating approval.

When applying for an Industrial Railway Operating Approval certificate the application must include the following:

- A copy of the third party liability insurance, minimum of 25 million required,
- Approved development permit from the appropriate municipality,
- Written evidence the local emergency response agencies have been consulted and have no objections,
- A copy of the company's Safety Management System plan,

- A copy of the site security management program as per Circular 2, and
- Verification of approved dangerous goods Emergency Response Assistance Plan (ERAP) when required.

7. INSPECTIONS

Periodic inspections are to be completed. At minimum, inspections must be:

- completed by trained industrial railway personnel,
- performed by a competent person who is trained in the *Transportation of Dangerous Goods Regulations*,
- performed by someone who is familiar with this circular's requirement and the *Industrial Railway Regulations*,
- conducted by a person who is trained on the tank car fittings and purpose thereof to be competent to inspect for leaks, and to follow mitigation procedures if a leak is found, and
- on arrival, all cars must be inspected as per the Alberta Industrial Railway Regulations Schedule 4 Industrial Railway Freight Car Inspection and Safety Rules.

Industrial railways must provide or make arrangements to provide a visual walk around inspection every:

Class	Inspection Schedule		
1	<i>Storage not allowed</i>		
2*	On arrival, then	Every 7 days thereafter	
3*	On arrival, then	Every 7 days for 3 weeks then	Every 30 days thereafter
4*	On arrival, then	Every 7 days for 3 weeks then	Every 30 days thereafter
5*	On arrival, then	Every 7 days for 3 weeks then	Every 30 days thereafter
6.1*	On arrival, then	Every 7 days for 3 weeks then	Every 30 days thereafter
7	<i>Storage not allowed</i>		
8*	On arrival, then	Every 7 days for 3 weeks then	Every 30 days thereafter
9*	On arrival, then	Every 7 days for 3 weeks then	Every 30 days thereafter

***On arrival** the LACTAC's must be inspected for leaks and safety appliances, then after every 7 days for 3 consecutive weeks then every 30 days thereafter.

8. RECORDS

Written records must be made of all inspections and retained for a period of two years after the cars are released from storage.

The inspection record for each car must, at a minimum contain:

- Date of last inspection
- Car initial and number
- Dangerous Goods Class of the residue last contained
- Storage track number
- Track location
- Lessor/owner
- Inspectors signature
- Placard condition
- Leak/ damage check
- Car condition and securement

9. TRAINING

All persons working on the site for the purposes of inspecting LACTAC's must be trained to ensure the person is competent to conduct the inspection.

Training is to include:

- Tank fittings, how they work and what is an abnormal situation.
- Tank qualifications marking, labelling & placarding.
- Emergency response procedures when a leaking tank car is identified.
- Company mitigation procedures for car leaking or damaged.
- Car handling and securement.

10. DOCUMENTATION

Any person, consignors, or their representatives, must ensure correct documentation for residue cars is provided to the long term LACTAC storage facility.

For more information of dangerous goods documentation/consist requirements please view the [Documentation Bulletin](#).

11. SAFETY MARKS

LACTAC cars must display the applicable placard.

For information on safety marks (placards) for railway vehicles, please view the [Safety Marks Bulletin](#).

12. INCIDENT NOTIFICATION

Reportable Release

Each person who has possession of the LACTAC at the time of a reportable amount release must comply with Part 8 of the Transportation Dangerous Goods Regulations and follow company mitigation procedures.

Reporting [TDG Regulations - Reporting](#)

Reportable releases must be reported immediately to the following:

- Alberta Transportation at 1-800-272-9600,
- The local police authority,
- The person's employer,
- The consignor of the dangerous goods,
- For a road vehicle, the owner, lessee or charterer of the road vehicle,
- For a railway vehicle, CANUTEC at (613) 996-6666 and,
- For an accidental release from a cylinder that has suffered a catastrophic failure, CANUTEC at (613) 996-6666.

For more information on dangerous goods spill/incident reporting please view the [Reporting Requirements Bulletin](#).

Note: As per the Alberta Railway Regulations AR177/2002 Part 3 Accidents and Insurance 35(1) (n) a reportable incident such as a derailment involving a dangerous goods must be reported to the 24/7 Alberta Transportation Coordination and Information Center 1-800-272-9600. The incident must be reported even if there was no release of any dangerous goods.

13. MITIGATION

Non-Reportable – Leak

- The company must have a written leak mitigation procedure for a leak of dangerous goods less than a reportable amount and staff must be trained on these procedures.

Reportable Release

- The company must have a written release mitigation procedure for a leak of dangerous goods of a reportable amount and staff must be trained on these procedures.

14. TRACK AND YARD

The track must be:

- Maintained to Class 2 or higher; and

- Must be designed to meet or exceed CN and CP “Engineering Specifications for Industrial Tracks”.

The yard must:

- Have fire suppression is to meet or exceed the Alberta Fire Code; and
- Designed to ensure emergency responder vehicles are able to respond to an incident on either side of the LACTAC; and
- The access road to the site and between the cars is designed to accommodate the largest/heaviest available emergency response vehicles that could respond; and
- Responder vehicles on the roadways must be able to access and egress the incident from two points on the road i.e. no dead end roads; and
- Compliant with Circular 1 “Guideline for the Transfer of Dangerous Goods To or From a railway vehicle”; and
- Compliant with Circular 2 “Guideline For The Development of Security Management Program for Dangerous Goods Transfer Sites”; and
- Have a derail to protect the facility and on each storage track.

15. RAILWAY AUDIT PROGRAM

To ensure ongoing safe railway operations and compliance with the railway regulations, all railways are required to conduct an audit on an annual basis and the submission of an external audit with their application for an operating approval renewal every three years. Note: This applies to category 1 and 2 railways only; category 3 railways may submit an internal self-audit in place of the external audit.

New industrial railway sites are required, as part of their operating, to submit a railway self-audit 6 months after the issuance of an industrial railway operating approval. The audit must be conducted by a competent person that has been trained on the *Alberta Industrial Railway Regulations* and railway auditing. [Railway Audit Protocols](#)

For more information on rail requirements, please contact Knut Ohm at 780-427-7572 (toll free in Alberta by first dialing 310-0000) or email Railsafety@gov.ab.ca.

For more information on dangerous goods requirements and incident reporting, please contact the 24/7 Coordination and Information Centre at 1-800-272-9600.