

Rail Terminal Facilities Operation Manual



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1. EMERGENCY CONTACTS

AGENCY	FORT ST JOHN	FORT NELSON
Fire Department	911 or 250-785-4333	250-774-3955
BC Ambulance	250-785-2079	250-774-2344
Air Medi-vac	Bailey 250-785-2518	Canadian 250-774-6171
	Canadian 250-787-0431	Highland 250-774-6106
	Qwest 250-787-5157	Qwest 250-774-5302
Hospital	250-262-5200	250-774-8100
Police	250-787-8100	250-774-2777
Oil & Gas Commission	250-261-5700	250-261-5700
Ministry of Environment	250-787-3411	250-774-3547
Provincial Emergency Program	1-800-663-3456	1-800-663-3456
WCB	250-785-1283	250-785-1283
	After hours	After hours
	1-866-922-4357	1-866-922-4357
Company office	250-785-5332	250-774-5332
Quality & Loss Control Manager	250-262-1390 (cell)	250-262-1390 (cell)
Branch Manager	250-263-5361 (cell)	250-500-2111 (cell)
Dispatcher	250-785-5332	250-774-5332



2. COMPANY OVERVIEW

2.1 The Importance of Quality Assurance

There are many costs related to unsafe work practices and loss, the greatest is the human cost. By protecting our employees, we are also protecting their friends, families, fellow workers, management, the public and the environment from the far-reaching effects of serious incidents. We are also protecting our ability to continue conducting business and employing people.

2.2 Commitment

The Management at Troyer Ventures is committed to maintain a workplace environment for Rail Terminals that is safe, environmentally protected, and built upon the foundation of exceptional quality. Specifically we will:

- Meet or exceed all applicable laws and regulations
- Continually improve our performance
- Regularly communicate with our employees on quality assurance issues
- Strive to prevent all forms of loss

2.3 Facility Policies

HEALTH AND SAFETY

Safety is everyone's responsibility. Troyer management has designed, constructed, and is operating distribution facilities to minimize risk of illness or injury to all workers. Facility design allows for significant safety margins in all operations by using top-of-the-line equipment, anticipating potential hazards associated with these operations, and providing appropriate corrective action where necessary.

Every worker will receive training on the hazards, inherent risk of the facility, and the emergency response process. Using this instruction, workers are expected to follow company protocol and procedures; this collaborative process between management and the workforce will minimize our exposure to risk and promote a safe and productive workplace.

We believe that a safe workplace is a productive workplace. Safety is the standard by which we develop a healthy and profitable business that will provide opportunities for many years to come.

OUR MOTTO: "There isn't a job anywhere that is worth the little finger of a man."

ENVIRONMENTAL

Our operations are designed, constructed and operated with minimal impact to the environment. The water, land, and air around us should not be impacted adversely by our operations. All products are tracked and monitored closely to ensure zero loss into the environment.



Land

The land on which our facilities are located is a valuable asset, and we have a responsibility to keep this asset contamination-free. The construction of well designed facilities operated by trained workers using effective procedures will prevent contamination. Dirt is not a container. All products will be contained by approved systems using various products of steel, concrete and synthetics.

Water

We are responsible for protection and conservation of our water resources, and have consequently designed our distribution facilities for minimal water consumption. Water is further conserved by minimizing contamination to regularly occurring surface water (e.g. rain or snow) by maintaining a clean site. Any water captured within containment berms may be exposed to trace elements and is therefore disposed of at approved disposal facilities in accordance with provincial regulation.

Air

Perhaps our most valuable resource is the air we breathe. Operations are designed and operated to eliminate harmful and unpleasant odours from the products we handle. This will promote healthy workers as well as good relationships with our neighbours.

OUR MOTTO: "Not one drop lost"

QUALITY ASSURANCE

At Troyer Ventures, we are committed to quality at every level of our facility operations, and these quality commitments include:

- Quality of Products: our rail facilities provide a number of available products that include base oil, invert fluids, and other associated chemicals. We ensure the quality of such products through our rigid purchasing standards and storage management processes
- Quality of Service: our commitment to service includes provision of modern, state-of-the-art
 equipment, reliability of equipment and infrastructure, and safe, effective handling and distribution
 processes

OUR MOTTO: "Excellence of Product and Service"

2.4 Enforcement of Company Rules

Employees, contractor's, subcontractors or visitors who knowingly disregard company rules will be penalized in accordance with the violation. Individuals who do not fulfill their responsibilities will be held accountable for any loss their negligence creates and subject to disciplinary action, dismissal, or liability under the law.

2.5 Responsibilities

Everyone employed by Troyer Ventures Ltd. is responsible for the success of our corporate goals and achievements. By fulfilling their responsibilities, everyone who works for Troyer Ventures Ltd. will share the benefits of a healthy workplace.



3. OPERATIONAL OVERVIEW

3.1 Scope of operations

1. Locations

Troyer has established rail terminal facilities in Fort St. John and Fort Nelson for the purpose of handling and storage of bulk fluids, primarily for third parties. Facility yards are located in existing industrial areas well suited for these purposes because of their location, access, and services; chain link fences and secure gates restrict yard access.

2. Design and Layout

Terminals have been designated for the storage of diverse fluids used by oil and gas corporations and bulk fuel distribution companies. Fluids are stored in bulk tanks of 750 and 1000-barrel capacity built to API 650 or API 12F specifications.

All tanks are located inside precast concrete containment compliant with BC Fire Code and BC Ministry of Water Land And Air Protection regulations. Precast walls also provide a barricading control designed to prevent impact to the tanks that could compromise their integrity.

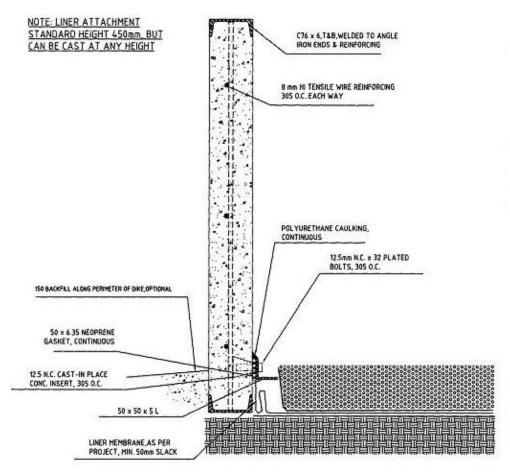
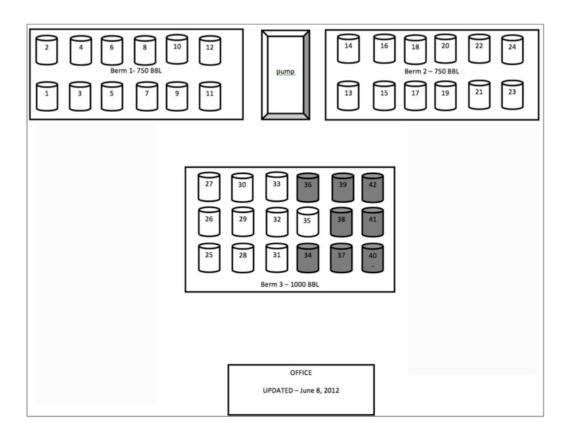


Fig. 1.1 Precast concrete containment



Fort Nelson Facility

Tanks in the Fort Nelson Rail Terminal are deployed within a multi-berm arrangement – Berm #1, #2, and #3 (see diagram).

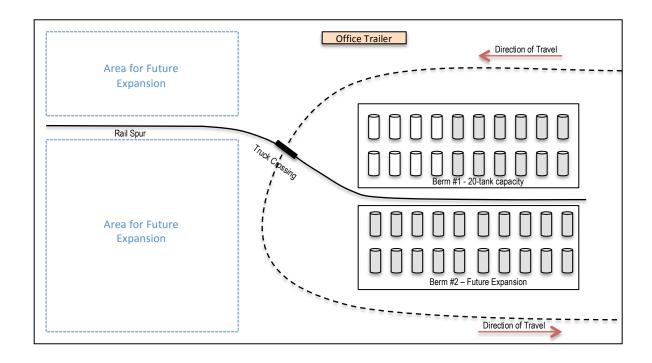






Fort St John Facility

Tanks in the Fort St John Rail Terminal are currently deployed within a single-berm arrangement – Berm #1 (see diagram).







3. Rail Access

A rail spur that allows for shipping and receiving of bulk fluids services rail terminal facilities. The facility operator is solely responsible for the loading and unloading of rail cars; all movement and management of the rail cars and the railway tracks will be under the direction of CN Rail or their approved contractors.

4. Trucking Terminal

A variety of trucks (i.e. company and contractor vehicles) will transport fluid to and from these distribution facilities to various locations. All trucks will operate to the same standards of safety and care when loading or unloading at these facilities.

3.2 Facilities

1. Real estate

Significant investments have been made in high quality properties suited for these distribution operations. Attention has been paid to ensuring the land is free from contamination and other environmental impacts. All operations on these lands will be conducted in such a way as to mitigate all unnecessary risk. By conducting operations according to Troyer environmental policies and facility procedures presented in this document, future liabilities will be mitigated on the properties wherein we operate.

2. Fluid storage and handling equipment

Using customized equipment and qualified tradesmen, tank distribution facilities have been designed and developed to minimize the potential for loss, ensure efficient and ongoing serviceability, and preserve asset value.

Buildings

On-site warehouse and office buildings are constructed and maintained in compliance with provincial and municipal regulations. Facilities are designed in such a manner as to not jeopardize the free flow of traffic or interfere with other operations in the area, and are maintained in a clean and tidy state, free of unnecessary clutter and debris.

3.3 Human resources

1. Employees

Facility operators manage rail terminal operations. These individuals are responsible to ensure all on-site activities are carried out according to policies and procedures and compliance with other applicable regulations. The operator will have full responsibility for:

- Site security and maintenance
- Equipment maintenance
- Product loading and unloading
- Product tracking
- Inventory reporting

The local branch manager or a designate will provide supervision of the facility operator. For more information, see Section 4.



2. Contractors

As needed, the company will hire contractors to perform various work associated with these facilities, including construction, maintenance, and trucking. Contractor activities will be supervised to ensure compliance to policies and procedures and inspected by company supervisors prior to completion and commissioning. Contractors will receive a site orientation prior to starting work to provide familiarity with company policies, procedures and practices, and the Emergency Response Plan.

3. Other workers

Facilities of this nature will see a variety of other workers on site, such as railroad workers, third party truck drivers, and occasional visitors and inspectors. All workers will receive a basic site orientation to identify the hazards associated with the facility and to review basic safety measures and responses.



4. ROLES AND RESPONSIBILITIES

4.1 Management Functions and Responsibilities

- 1. Branch Manager: these managers are ultimately responsible for efficient and profitable operation of the rail terminal facility. Responsibilities include:
 - Oversight of facility design, development, and maintenance
 - Ensuring on-site operations and activities are compliant with company policy, procedures and applicable regulations
 - Oversight of employee/contractor hiring and firing, orientation training, disciplinary action, and ongoing supervision
- 2. Quality and Loss Control Manager: this manager is responsible to work in collaboration with the Branch Manager to ensure that distribution facilities are managed in accordance to company quality assurance practices. Responsibilities include:
 - Occasional site visits to conduct performance inspections and evaluations
 - Oversight of distribution facility practices and procedures, training processes, and orientation manuals

4.2 Facility Operator Functions and Responsibilities

- 1. Supervision: the facility operator is responsible to supervise day-to-day operations. Responsibilities include:
 - Providing a site orientation that includes basic facility operation and emergency response processes and procedures
 - Monitoring the activities of on-site workers and provide loss control
- 2. Maintenance: the facility operators responsible for ongoing maintenance to facility piping and equipment. Responsibilities include:
 - Unloading of rail cars and transferring of fluids into the appropriate storage facilities
 - Daily inspections of facility piping and equipment
 - Site clean-up and disposal
 - Remediation of all deficiencies discovered during the course of daily activities
 - · Reporting to the Branch Manager on a daily basis
- 3. Record Keeping: the facility operator is responsible to maintain accurate inventories and records for the distribution facility. Responsibilities include:
 - Recording daily inspections and corrective actions
 - Maintain accurate daily inventories of all products
 - Maintain accurate detail of shipment of goods to and from the facility, whether by truck or rail car
 - NOTE: further information on record keeping is found in Section 8.3



4.3 Worker Functions and Responsibilities

- 1. Third-Party Companies: these are commonly independent companies providing fluid transportation services (e.g. moving fluids to and from the distribution facility) and hired and paid by someone other than Troyer Ventures. Responsibilities include:
 - Receive facility orientation prior to conducting work
 - Conduct operations according to Troyer policies, procedures, and practices
 - Report any incidents to facility operator or, if after hours, designated personnel
- 2. Direct Hires: these are independent companies commonly providing fluid transportation, construction, or maintenance services and are hired and paid by Troyer Ventures. Responsibilities noted under third-party companies apply.
- 3. Troyer Workers: employees or contract workers hired by the company to conduct various job activities. Responsibilities include:
 - Receive a facility orientation and any other pertinent training prior to commencing work at the distribution facility
 - Conduct activities according to company policy, procedure, and practices
 - Report any incidents to the facility operator or, if after hours, designated personnel



5. FACILITY TRAINING

5.1 Regulatory Training

Training	Required for
WHMIS	All
TDG	Specified personnel ¹
First Aid	Specified personnel ²
H ₂ S Alive	Specified personnel ³
Petroleum Safety Training	Specified personnel ⁴
Confined Space Entry	Specified personnel ⁵
Fall Protection	Specified personnel ⁶

- 1 Facility operator, trucking personnel
- 2 Facility operator, work teams of two or more personnel
- 3 Facility operator, personnel conducting tank entry
- 4 Facility operator, contractor personnel operating in the oil and gas industry
- 5 Facility operator, personnel conducting tank entry
- 6 Facility operator, all personnel required to conduct activities at Heights exceeding 3 m

5.2 Initial Orientation

- 1. Required for all personnel conducting activities at rail terminal facilities
- 2. Includes review of the Facility Orientation Manual through one-on-one training OR online training
- 3. Practical demonstration of operating techniques

5.3 Refresher and Incident Retraining

- 1. Refresher Training: periodic training conducted to maintain compliance to regulatory requirements (i.e. WHMIS, TDG, H2S Alive) and to maintain competency from a company perspective (i.e. emergency response, operational effectiveness)
- 2. Incident Retraining: required training in the event of an incident or substandard performance evaluation where it is deemed the worker has contributed to the event



6. HAZARD ID, RISK ASSESSMENT, AND CONTROL

6.1 Overview

In accordance with our company wide hazard identification and risk assessment process, hazards will be identified at all fluid distribution facilities before work begins and appropriate control measures implemented.

6.2 Hazard Identification and Risk Assessment

IDENTIFYING HAZARDS

The following methods are used companywide in Troyer operations to identify workplace hazards:

- 1. Task Inventory Process: this is a formal, documented process conducted by the Quality and Loss Control Manager and other team members for all Rail Terminal Facilities. Procedures developed in section 7 are a result of the task analysis
- 2. Casual Sweep: this is an informal, undocumented process used by all workers to visually identify hazards prior to commencing work, and training for this process is provided at initial orientation
- 3. Facility Inspections: this is a formal, regularly scheduled documented process normally conducted by the Facility Operator. All corrective action arising from such inspections is recorded and monitored in the Troyer Tracking Database

RISK ASSESSMENT

The process of risk assessment (severity and probability) is used primarily during the Task Inventory Process and during facility inspections. <u>Basic</u> evaluation of risk is explained to all workers during orientation for application as part of the casual sweep process.

Determining Severity and Probability

The Four Levels of Severity

- 4 = Imminent Danger (IDLH)
- 3 = Serious (Lost Time)
- 2 = Minor (Medical Aid)
- 1 = Negligible

The Four Levels of Probability

- 4 = Probable (once or more per day)
- 3 = reasonably probable (once or more per week)
- 2 = Remote (once or more per month)
- 1 = extremely remote (once or more per year)



Determining the Level of Risk

Severity and probability values are multiplied together to arrive at a final value that fall within the following ranges:

- High = 9-16: probable chance of occurrence or serious/IDLH or extreme loss potential
- Medium = 4-8: reasonable chance of occurrence or serious loss potential
- Low = 1-2: remote chance of occurrence or negligible/minor loss potential

The value range therefore determines the level of risk, and the amount of risk drives the decision process for selection and implementation of control measures. Controls can be classified broadly within the following three categories:

- E Engineering
- A Administrative
- P Personal Equipment (e.g. PPE and Apparel)

6.3 Implementing Control Measures

OVERVIEW

Once hazards have been identified and risk assessed, corrective action must be determined and implemented. Effective controls include:

- Administrative Controls: policies, procedures, checklists, forms
- Engineering Controls: guarding, barriers, warning devices, isolation, signage
- Personal Controls: personal protective equipment, personal protective apparel

Using an informal process such as the Casual Sweep, corrective action would be decided upon on-the-fly and immediately implemented. Using a formal process such as a daily Facility Inspection, corrective action would be determined and assigned according to priority.

SIGNAGE

Rail terminal facilities will have the following signage in place:

- Emergency Shutdown Switch
- No Smoking or Open Flame
- Speed Limit 15km/hour
- Fire Extinguisher Identification
- Spill Kit Identification
- TDG/WHMIS identification markings on tanks and piping
- Loading/Unloading Placards
- Facility Sign
- First Aid/Eyewash Station
- Muster Area



WHMIS

All personnel will have comprehensive Workplace Hazardous Materials Information System training before conducting work at Rail Terminals. In addition, every rail terminal will maintain the following for all products:

- Appropriate labeling and signage
- Material Safety Data sheets (MSDS will be maintained both in hardcopy format at the facility office and in the Troyer Online Library)

6.4 The Five Steps of Facility Hazard Control

- 1. <u>Inspect</u> the worksite prior to commencing activities (Casual Sweep or Formal Inspection)
- 2. **Document** the deficiency and corrective action (in a formal inspection)
- 3. **Review** potential or actual hazards with the crew members
- **4. Reappraise** the hazard potentials throughout the project
- **5. Revise** working practices to accommodate changes



7. SPECIAL EQUIPMENT

7.1 Personal Protective Equipment

Personal Protective Equipment and Apparel is required when conducting activities at Troyer Rail Terminal Facilities. The table below illustrates the type of equipment required.

Type of Equipment	Required For
Hard Hat (CSA-Z94.1-92)	All workers
Safety Boots (CSA-Z195-M92) Green triangle with 6" ankle support	All workers
Safety Glasses (CSA-Z94.3-92)	All workers
Fire Retardant Clothing (Nomex IIIA or equivalent)	Workers handling fluid transfer and distribution
Hearing Protection	All workers
Gloves	All workers
Self-Contained Breathing Apparatus (SCBA)	Personnel required to enter confined spaces
Maintanance of Personal Protective Equipment	

Maintenance of Personal Protective Equipment

- Employees and contractors are responsible for the proper use, cleaning, and storage of Personal Protective Equipment and Apparel
- All PPE must be kept clean, in good repair, and not exceed the expiration period of use

7.2 Response Equipment

Emergency response equipment is available at every Troyer Rail Terminal Facility. The table below illustrates the type of equipment maintained at each facility site.

Type of Equipment	Location	Required For
Drum Spill Kit	1 centrally located	Containment of spills
5-gallon Spill Kits	1 at each load box	Containment of spills
20-BC Fire Extinguishers	2 each side of containment berm	Initial fire attack
Vacuum Trucks	Main office location	Cleanup of spills
Cell phones	Cell phones - individuals	General and emergency communication



8. GENERAL FACILITY PROCEDURES

8.1 Maintenance Procedures

INSPECTIONS

Inspections are regularly conducted on all Troyer Rail Terminal facility sites and include:

- 1. Daily visual inspection of all facility components and documented completion on a daily log
- 2. Weekly tank liquid level measurements will be documented on the Rail Terminal Fluid Level Log
- 3. Monthly inspections of all facility components documented on the *Rail Terminal Inspection Form*

REGULAR AND SPECIAL MAINTENANCE

Regular maintenance of Troyer Fluid Distribution Facilities is the responsibility of the Facility Operator and consists of maintaining site cleanliness, tank fluid level checks, and minor repairs.

Special Maintenance work to be performed will be determined by the Branch Manager and Facility Operator or designated supervisor. Prior to commencing special work, the Facility Operator or designated supervisor will hold a pre-job meeting to review the work that includes:

- 1. Work scope
- 2. Potential hazards
- 3. Special equipment requirements
- 4. Emergency response plan
- 5. Impact of maintenance on operations

Additional measures include:

- All tanks or plumbing will be empty and isolated prior to unhooking or welding.
- The Facility Operator or designated supervisor will supervise ongoing activity to ensure it remains within the scope of the planned project.
- Completed work will be inspected and approved prior to the release of the crews.
- All changes that impact the normal flow of operations will be clearly documented and communicated with other works to mitigate risk.

8.2 Security Procedures

All yards and facilities must be secured to reduce the risk of inadvertent or malicious activities that would negatively impact operations.

- 1. All yards will be fenced and gated with chain link fence.
- 2. Gates must be locked at all times when the Facility operator, designated supervisor, or other company representative is not present.
- 3. Workers who have not received clearance to work alone must be accompanied by the facility operator, designated supervisor, or other company rep for the full duration of their time on site.
- 4. All lines from storage tanks will have double valves that will be securely closed with caps in place.
- 5. All tanks, valves, and loading points will be clearly labelled.
- 6. Keys and pass codes will be given to the local fire department to allow for emergency access.



8.3 Measurement and Recordkeeping Procedures

RECEIVING PRODUCT

- 1. Review Bill of Lading shipping documents to verify the following:
 - a. Consignor
 - b. Product specification
 - c. MSDS
 - d. Volume shipped
- 2. Verify shipping container capacity and volume shipped
- 3. Identify the appropriate tank for receiving the product
- 4. Write down tank level from gauge board prior to beginning to unload and after unloading is complete
 - NOTE #1: volumes must be converted from m to m3 (quantity X .9488)
 - NOTE #2: Tug on tank level to ensure the gauge is freely working and recorded data is accurate
- 5. Write both gauge board readings and the difference on the product tracking log
- 6. Any difference of more than 2% must be reported to consignor
- 7. Update Product Tracking Logs

SHIPPING PRODUCT

- 1. Ensure all workers involved in shipping have received facility orientation
 - NOTE: in some instances, bulk fluid distribution companies may conduct their own off-site orientation using the Troyer Rail Terminal Facility Orientation Handbook
 - NOTE: Troyer Ventures will always conduct an on-site practical orientation for all parties
- 2. Review shipping instructions to verify volume, carrier, product, and delivery location.
- 3. Fill out Bill of Lading shipping document with appropriate information
- 4. Ensure destination tanks have sufficient volume, are certified, and meet cleanliness requirements
- 5. Identify which tank to load from and gauge tank prior to loading
- 6. Load product into tank following loading procedures and gauge tank after loading is complete
- 7. Record both tank gauge readings on the shipping document and identify the total volume loaded.
- 8. Update Product Tracking Logs

INVENTORY REPORTING

Product Tracking Logs will be maintained current to the end of each day and document:

- 1. Date
- 2. Product Name
- 3. Bill of Lading Information
 - a. BOL Number
 - b. Destination (IN/OUT)
 - c. Carrier
 - d. Product Quantity (Litres)



- 4. Tank and Volume Information
 - a. Tank Number
 - b. Gauge Readings (before/after)
 - c. Total Transferred
- 5. Billing Information
 - a. Call out Fee
 - b. Loading Fee

The Product Tracking Logs will be maintained for each Consignor that is storing fluid and a copy will be forwarded to the Consignor's office at least monthly, or as frequently as requested. Maintenance of the Product Tracking Logs will be the responsibility of the Facility Operator or designated supervisor.

By the third day of each month, a summary of all Product Tracking Logs will be forwarded to the accounting department for billing.



8.4 Emergency Response Procedures

In the event of an emergency at the distribution facility, use the following response procedures:

FIRE RESPONSE

FIRES

In the event of an industrial fire, use the following as a guide to your response:

- Notify other workers to evacuate and move to a safe area
- If the fire involves fuel, immediately shut off the flow by closing valves and activate emergency shutdown switch if you can do so without endangering your personal safety or that of others
- Phone the emergency contacts and request assistance
- Do not attempt to fight the fire if there is a danger of explosion or flare-ups
- In combating the blaze, use available fire extinguishers with a side to side sweeping motion aimed at the base of the flames
- If you are able to extinguish the fire, re-contact emergency officials and update them on the status of the worksite
- If you are unable to fight the fire, maintain a safe distance and key personnel away from the area. Maintain contact with officials, advising on the fire status
- Complete an incident report at the completion of the emergency

In the event of an environmental fire, use the following as a guide to your response:

- If you have received previous fire suppression training and are able to combat the fire, take action but do not place yourself in harm's way. If you are unable to combat, extinguish, or contain the fire, contact outside help for assistance
- Assist in initial attack when help arrives
- Complete an incident report at the completion of the emergency

Emergency Contacts for Industrial Fires (Contact in the following order)	
General emergency (Fire, RCMP, Ambulance)	911
Customer representative or operator	As per on-site information
Company management	 Head office – 250. 785. 5332 Fort Nelson: 250.774.5332 Rainbow Lake: 780.956.3466 Grande Prairie: 780.532.7752 Grande Cache: 780.827.2939
Provincial Emergency Program (BC) Alberta Emergency Management Agency	1. 800. 663. 3456 1.866.618.AEMA (2362)
BC Oil & Gas Commission Hot Line Alberta Energy Resources Conservation Board	250. 261. 5700 (780) 538-5138 (GP 24-hr emergency)
WorksafeBC (if required) Workers Compensation Board (Alberta)	604. 273. 7711 (Richmond) 1-800-661-9608



MEDICAL RESPONSE

MEDICAL AID (Injury or Death)

In the event of injury or death, use the following as a guide to your response:

- Survey the scene. Make sure there is no pending danger to yourself or the injured person
- Assess the nature of the injuries and condition of the patient and stabilize to the ability of your training and knowledge
- Call for assistance, using the emergency numbers following these procedures
 - Convey the condition of the patient
 - State your experience level as a First Aid Attendant (i.e. Level I)
 - Describe your location and approximate distance from medical aid
 - If Air Rescue is required, provide the following information:
 - Your position coordinates (Latitude and Longitude)
 - Advise if there are any overhead hazards
 - Provide physical location data (i.e. on a road, by a lake)
- If you have First Aid training, retrieve your First Aid kit and provide emergency care. If you do not have training, stay with the patient until help arrives, making them as comfortable as possible
- When help arrives, render assistance and transport as soon as possible
- · In the event of death, company management will follow-up and notify the next of kin
- Upon completion of the emergency:
 - If you are a First Aid attendant, fill out the treatment book record
 - Complete an incident report

Emergency Contacts for Medical Aid (Contact in the following order)	
General emergency (Fire, RCMP, Ambulance)	911
Customer representative or operator	As per on-site information
Company management	• Head office – 250. 785. 5332
	• Fort Nelson: 250.774.5332
	Rainbow Lake: 780.956.3466
	Grande Prairie: 780.532.7752
	Grande Cache: 780.827.2939
Provincial Emergency Program (BC)	1. 800. 663. 3456
Alberta Emergency Management Agency	1.866.618.AEMA (2362)
BC Oil & Gas Commission Hot Line	250. 261. 5700
Alberta Energy Resources Conservation Board	(780) 538-5138 (GP 24-hr emergency)
WorksafeBC (if required)	604. 273. 7711 (Richmond)
Workers Compensation Board (Alberta)	1-800-661-9608



ACCIDENTAL RELEASE (HAZARDOUS FLUIDS)

HAZARDOUS FLUID SPILL ACCIDENTAL RELEASE

In the event of an hazardous fluid release, use the following as a guide to your response:

- Stop the Flow!
 - Shut off pumps, valves, nozzles, or activate emergency shutdown switch
- Warn others in the immediate vicinity of the spill
 - If there is a danger of fire or explosion, enforce "smoking"
 - Extinguish any open flame
- Contain the Spill
 - Use PPE as required to protect yourself
 - Block ditch lines, culverts, drains
 - Surround the spill with an earth/snow berm and use spill kits
- Call for assistance as required
- Notify applicable personnel
 - Your immediate supervisor
 - The customer for whom you are performing the work
 - Appropriate agencies (see emergency contacts below)
- Conduct cleanup and restorative action
 - Immediate action: Mop up excess fluids with absorbent materials
 - Completion: use a vacuum truck or equivalent to remove contaminated soil
- Report the spill and complete Incident Report

Emergency Contacts for Accidental Release of Fluids (Contact in the following order)		
General emergency (Fire, RCMP, Ambulance)	911	
Customer representative or operator	As per on-site information	
Company management	• Head office – 250. 785. 5332	
	• Fort Nelson: 250.774.5332	
	Rainbow Lake: 780.956.3466	
	Grande Prairie: 780.532.7752	
	Grande Cache: 780.827.2939	
Provincial Emergency Program (BC)	1. 800. 663. 3456	
Alberta Emergency Management Agency	1.866.618.AEMA (2362)	
BC Oil & Gas Commission Hot Line	250. 261. 5700	
Alberta Energy Resources Conservation Board	(780) 538-5138 (GP 24-hr emergency)	
WorksafeBC (if required)	604. 273. 7711 (Richmond)	
Workers Compensation Board (Alberta)	1-800-661-9608	



ACCIDENTAL RELEASE (TOXIC GAS)

TOXIC GAS ACCIDENTAL RELEASE

In the event of a toxic gas release, use the following as a guide to your response:

- Immediately evacuate the area and warn others in the vicinity of the release
- Ensure you are upwind from the toxic gas zone and shut off all sources of ignition that could create an explosion potential
- Call for immediate assistance
- If no one is injured, do not attempt to reenter the toxic zone
- Wait for experienced help to arrive; take no response action

In the event a gas release has downed a worker, use the following as a guide to your response:

- Stay upwind from the toxic gas zone and eliminate sources of ignition (i.e. explosion potential)
- Immediately request assistance from nearby operators
- Use the safety lifeline (if in place) to attempt to retrieve the worker
- If the worker cannot be rescued via lifeline, do not enter the zone to assist unless:
 - The primary responder has appropriate PPE in place
 - The primary responder has appropriate breathing apparatus
 - In the event of confined space entry, ensure:
 - The primary responder has a safety harness and lifeline
 - The secondary responder is present outside the confined space or toxic zone
 - Voice communication/hand signals are established with the secondary responder
- Remove injured worker to a location outside the toxic zone and provide First Aid if qualified:
 - Initiate Breathing ventilations with pocket mask
 - Initiate CPR in the event of heart failure
 - Upon restoration of breathing, turn the victim in the recovery position
 - Immediately provide oxygen if available
- Once the workers condition is stabilized transport to medical aid. If the victim's condition remains unstable or CPR has been administered, evacuate the patient

Complete a Incident Report

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Emergency Contacts for Toxic Gas Release (Contact in the following order)		
General emergency (Fire, RCMP, Ambulance)	911	
Customer representative or operator	As per on-site information	
Company management	• Head office – 250. 785. 5332	
	• Fort Nelson: 250.774.5332	
	Rainbow Lake: 780.956.3466	
	Grande Prairie: 780.532.7752	
	Grande Cache: 780.827.2939	
Provincial Emergency Program (BC)	1. 800. 663. 3456	
Alberta Emergency Management Agency	1.866.618.AEMA (2362)	
BC Oil & Gas Commission Hot Line	250. 261. 5700	
Alberta Energy Resources Conservation Board	(780) 538-5138 (GP 24-hr emergency)	
WorksafeBC (if required)	604. 273. 7711 (Richmond)	
Workers Compensation Board (Alberta)	1-800-661-9608	



9. FORT NELSON LOADING/UNLOADING PROCEDURES

9.1 Railcar Procedures

LOADING FROM TANK CARS INTO FACILITY STORAGE TANKS

Stage #1: Connecting the Tank Car to the Facility

To connect the Tank Railcar to facility piping, use the following procedures:

- 1. Check the mechanical brake on the tank car
- 2. Attach grounding cable
- 3. Place spill tray under car valve and connection assembly
- 4. Check top vent by breaking the seal and ensuring the vent is operational
- 5. **Tip**: check vent seal number against Bill of Lading shipping document
- 6. Attach 3-inch transfer connectors to the base of the tank railcar
- 7. Attach transfer hose to the tank railcar transfer connectors
- 8. Hook up transfer hose to the proper load box (e.g. diesel or base oil)
- 9. **Tip**: ensure 1-inch bleed valve and ¼-inch sample port valve is in the closed position
- 10. **Tip**: verify rail bonding strap is in place and in good condition

Stage #2: Preparing to Transfer

Step #1: Storage Tank Valves and Infeed Piping

Starting from the intended facility storage tank, do the following:

- 1. Open infeed valve at base of storage tank
- 2. <u>Tip</u>: ensure the tank <u>discharge</u> valve is closed
- 3. Open the inline valve that feeds the intended storage tank

Step #2: Pump Valves and Piping

At the high-volume transfer pump, do the following:

- 1. Open the two inline valves on the **discharge** side of the pump
- 2. **Tip**: ensure auxiliary infeed valve on the discharge side is closed
- 3. Open the two inline valves on the **infeed** side of the pump
- 4. Tip: close & lock cross connection valve between the diesel and base oil pump systems

Step #3: Load Box /Tank Railcar Connection Valves and Piping

Between the railcar tank/transfer connector assembly and the facility load box, do the following:

- 1. Open load box gate valve
- 2. **Tip**: ensure load box 1-inch bleed-valve and ¼-inch sample valve is closed
- 3. Open car connector assembly valve
- 4. Place spill tray under tank car valve and connector assembly
- 5. **Tip**: ensure car seal is in place and verify seal number against Bill of Lading shipping document
- 6. Break the car seal on tank car bottom valve
- 7. Open tank car bottom valve



Stage #3: The Transfer Process

To transfer fluids from the tank car into the intended storage tank, do the following:

- 1. Before activating pump, check hoses and piping for leaks
- 2. Start high-volume transfer pump
- 3. Monitor fluid transfer and check tank gauges on a regular basis
- 4. **Tip**: pull test the gauge to ensure it is freely moving
- 5. **Tip**: do not fill facility storage tank greater than 95% of capacity

Stage #4: Completing the Transfer Process

Step #1: Shutting off Valves and Piping

To complete the transfer process, do the following:

- 1. Walk the connected transfer hose back to the load box to ensure all fluids are sucked out
- 2. Close load box gate valve
- 3. Shut off high volume transfer pump
- 4. Close the tank car bottom valve and connector assembly valve
- 5. Close pump infeed and discharge valves
- 6. Close tank inline piping valve
- 7. Close discharge/infeed valve at base of facility tank

Step #2: Disconnecting from the Tank Car

- 1. Disconnect transfer hose, draining any residual fluid into the drip tray
- 2. Install protective caps on both ends of the transfer hose
- 3. Disconnect the connector assembly and install bottom cap on tank car
- 4. Place keeper pin in the tank car bottom load valve
- 5. Install a Troyer snap-tie seal on the bottom load valve and record # on product log sheet
- 6. Close top car vent and cover and install a Troyer snap-tie seal



9.2 Tank Truck Loading/Unloading Procedures

LOADING FROM THE FACILITY

To load a tanker truck at the facility, use the following procedures:

Stage #1: Getting Started

- 1. Park truck at a load box riser
- 2. Don all personal protective equipment
- 3. Chock wheels
- 4. Attach ground cable
- 5. Check load level tank gauges for functionality.
- 6. Hook-up loading hose to load box
- 7. Ensure that all valves are in the proper positions on truck
- 8. Open discharge valve at base of storage tank
- 9. Engage metering system (if applicable)
- 10. Open load box valve
- 11. Open truck valve
- 12. Engage pump to load fluid
- 13. Tip: check lines for leaks
- 14. Monitor the load level indicators at all times

Stage #2: After the truck is loaded

- 1. Close the valve at the load box
- 2. Open 1-inch bleed valve
- 3. Drain hose into the pump by walking the hose up from one end to the other
- 4. Remove hose and install protective caps
- 5. Disengage pump and close valves
- 6. Disengage PTO
- 7. Secure hose on truck
- 8. Disconnect ground cable
- 9. Close discharge valve at base of storage tank
- 10. Close any other inline valves on facility discharge piping lines
- 11. Remove wheel chocks.
- 12. Ensure area is clean
- 13. Proceed with caution



10. FORT ST JOHN LOADING/UNLOADING PROCEDURES

10.1 Railcar Procedures

LOADING FROM TANK CARS INTO FACILITY STORAGE TANKS

Stage #1: Connecting the Tank Car to the Facility

To connect the Tank Railcar to facility piping, use the following procedures:

- 1. Check the mechanical brake on the tank car
- 2. Attach grounding cable
- 3. Place spill tray under car valve and connection assembly
- 4. Check top vent by breaking the seal and ensuring the vent is operational
- 5. **<u>Tip</u>**: check vent seal number against Bill of Lading shipping document
- 6. Attach 3-inch transfer connectors to the base of the tank railcar
- 7. Attach transfer hose to the tank railcar transfer connectors
- 8. Hook up transfer hose to the proper load box (e.g. diesel or base oil)
- 9. **Tip**: ensure 1-inch bleed valve and ¼-inch sample port valve is in the closed position
- 10. **Tip**: verify rail bonding strap is in place and in good condition

Stage #2: Preparing to Transfer

Step #1: Storage Tank Valves and Infeed Piping

Starting from the intended facility storage tank, do the following:

- 1. Open infeed valve at base of storage tank
- 2. **Tip**: ensure the tank discharge valve is closed

Step #2: Load Box /Tank Railcar Connection Valves and Piping

Between the railcar tank/transfer connector assembly and the facility load box, do the following:

- 1. Open load box gate valve
- 2. **Tip**: ensure load box 1-inch bleed-valve and ¼-inch sample valve is closed
- 3. Open car connector assembly valve
- 4. Place spill tray under tank car valve and connector assembly
- 5. **Tip**: ensure car seal is in place and verify seal number against Bill of Lading shipping document
- 6. Break the car seal on tank car bottom valve
- 7. Open tank car bottom valve

Stage #3: The Transfer Process

To transfer fluids from the tank car into the intended storage tank, do the following:

- 1. Before activating pump, check hoses and piping for leaks
- 2. Start high-volume transfer pump
- 3. Monitor fluid transfer and check tank gauges on a regular basis
- 4. **<u>Tip</u>**: pull test the gauge to ensure it is freely moving
- 5. **Tip**: do not fill facility storage tank greater than 95% of capacity



Stage #4: Completing the Transfer Process

Step #1: Shutting off Valves and Piping

To complete the transfer process, do the following:

- 1. Walk the connected transfer hose back to the load box to ensure all fluids are sucked out
- 2. Close load box gate valve
- 3. Shut off high volume transfer pump
- 4. Close the tank car bottom valve and connector assembly valve
- 5. Close pump infeed and discharge valves
- 6. Close tank inline piping valve
- 7. Close discharge/infeed valve at base of facility tank

Step #2: Disconnecting from the Tank Car

- 1. Disconnect transfer hose, draining any residual fluid into the drip tray
- 2. Install protective caps on both ends of the transfer hose
- 3. Disconnect the connector assembly and install bottom cap on tank car
- 4. Place keeper pin in the tank car bottom load valve
- 5. Install a Troyer snap-tie seal on the bottom load valve and record on product log
- 6. Close top car vent and cover and install a Troyer snap-tie seal



10.2 Tank Truck Loading/Unloading Procedures

LOADING FROM THE FACILITY

To load a tanker truck at the facility, use the following procedures:

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- 3. Chock wheels
- 4. Attach ground cable
- 5. Check load level tank gauges for functionality.
- 6. Hook-up loading hose to load box
- 7. Ensure that all valves are in the proper positions on truck
- 8. Open discharge valve at base of storage tank
- 9. Engage metering system (if applicable)
- 10. Open load box valve
- 11. Open truck valve
- 12. Engage pump to load fluid
- 13. QA Tip: check lines for leaks
- 14. Monitor the load level indicators at all times

Stage #2: After the truck is loaded

- 1. Close the valve at the load box
- 2. Open 1-inch bleed valve
- 3. Drain hose into the pump by walking the hose up from one end to the other
- 4. Remove hose and install protective caps
- 5. Disengage pump and close valves
- 6. Disengage PTO
- 7. Secure hose on truck
- 8. Disconnect ground cable
- 9. Close discharge valve at base of storage tank
- 10. Close any other inline valves on facility discharge piping lines
- 11. Remove wheel chocks.
- 12. Ensure area is clean
- 13. Proceed with caution