# Chemtrade North Vancouver Community Update

*July 2025* *Issue 7*

***Knowing the significant role that Chemtrade liquid chlorine plays in supporting safe drinking water for millions of Canadians, and the growing uncertainty in North American trade, we need to start having conversations now regarding how to maintain our potential future operations and secure our Canadian supply chain of this critical product.***

## About Chemtrade

Chemtrade's North Vancouver chlor-alkali facility is one of Canada's largest providers of liquid chlorine – accounting for 40 per cent of all liquid chlorine available in Canada. Regionally, this equates to over 70 per cent of the liquid chlorine available in BC and Alberta. **Why is this important?** A study conducted by Statistics Canada in 2015 found that 96 per cent of Canadian communities relied on chlorine to treat their municipal water supply, which supplies over 30.7 million Canadians.

### In this issue:



## We would like to invite everyone to Community Day on Sept. 6

We are excited to invite our community neighbours to join us, along with our employees and their families, and visit our site to learn more about what we do, and how we do it safely. There will be facility tours, family activities, food, and information stations so you can learn more about Chemtrade, and our plans to secure long-term operations while also improving safety and reducing potential risk to the surrounding community.

### Event details:

**When:** **11:00 A.M. – 3:00 P.M. Saturday, September 6, 2025**

**Where:** **Chemtrade's North Vancouver facility 100 Amherst Avenue, North Vancouver**

**What:** **Tours, activities, food, information, and family fun!**

### Good to know:

- Limited parking will be available on site. We ask that where possible, please use transit or carpool.
- Tours of the site will be provided using shuttle buses so everyone can participate.
- Chemtrade employees from across the company, including senior leadership, will be on-site to answer your questions.
- No need to RSVP, but for more information about the facility, please visit www.AskChemtrade.ca. For more information about the event, please email Amy Jonsson at ajonsson@chemtradelogistics.com

***Above:*** *our salt pile is always a popular stop on our public tours. Did you know that our salt is actually solar-dried ocean salt? Every month, we import this salt from the Baja region of Mexico and use it to manufacture our chlorine. Salt + Water + Electricity = Chlorine (and gaseous hydrogen)*

## Answering questions from the community: Facility safety

One of the most common things we get asked about is facility safety, including our rail operations. While we can't speak on behalf of the railroad operators, we can share information on the steps Chemtrade takes to ensure the safe manufacturing and transportation of our product and provide background on the rules governing the rail industry in Canada.

### Rail is one of the safest ways to transport hazardous materials overland in Canada

In both Canada and the US, the only way to transport liquid chlorine is either through pipeline, or with specially designed railcars.

***Above:*** *One of the rail loading areas at our North Vancouver facility*

Products classified as Toxic Inhalation Hazards (TIH), which include liquid chlorine, are among the most stringently regulated materials to transport via rail, ensuring safe and secure transportation.

Chemtrade's transportation safety and security programs have established our company as a leader in the industry. Our programs meet and exceed requirements defined by regulatory agencies and industry associations including:

- *Transport Canada, Transportation of Dangerous Goods (TDG)*
- *US Department of Transportation, Federal Railroad Agency (FRA), Pipeline & Hazardous Materials Safety Administration (PHMSA)*
- *U.S. Customs-Trade Partnership Against Terrorism (CTPAT),*
- *The Chlorine Institute (CI)*
- *Chemistry Industry Association of Canada (CIAC)*
- *American Chemistry Council (ACC)*
- *Responsible Care®*

From car design and maintenance, through each step in the rail transportation cycle, Chemtrade has developed standards, procedures, assessments and inspections, providing multiple layers of protection to ensure safe and secure transportation of our products. It should be noted that ***Chemtrade has never had a TIH release during transportation.***

## Review of safety procedures at Chemtrade's North Vancouver facility

We are serious about safety in all aspects at our site – including the maintenance of equipment to ensure we are preventing potential incidents before they occur. This goes for our rail operations and our production processes as well.

***Triple-checking all rail cars:*** We inspect all rail cars when they arrive at site, prior to loading, monitor the filling process and conduct one final inspection before the cars leave our site.

***Adhering to all regulatory requirements:*** Industry and railroad-specific procedures cover employee training, train speeds, inspections, rail yard practices and locomotive operation. Federal regulations from various agencies, including the Federal Railroad Association (FRA) and the Pipeline & Hazardous Materials Safety Administration (PHMSA), dictate safety practices in areas such as placement of railcars carrying certain commodities in the train "consist," hazmat routes, an inspection of equipment and track, speed restrictions and more. *Reference AAR.org*


***Above:*** *A liquid chlorine rail car, equipped with additional protections meant to reduce the risk of an accidental release, like reinforced walls and rollover protection*

***Maintaining a dedicated fleet of liquid chlorine railcars:*** Chemtrade maintains and operates a fleet of about 200 leased railcars, all of which have been specifically designed for the transport of our various products – like liquid chlorine - and meet all the required regulatory specifications.

***Safe storage of chlorine on site:*** Once our proposed safety improvements are complete, we will be moving to a *produce and ship model*, meaning we will have less than four (4) tonnes of liquid chlorine in the facility at any given time, which will consist of the amount of chlorine within the facility pipes and at different stages of production.

***Above:*** *one of three onsite chlorine storage tanks. Note that only one is used to store liquid chlorine, the other two have been converted to vacuum storage capable of capturing and storing all chlorine on site*

Currently, we can store up to 93 tonnes of liquid chlorine onsite, and we do that in a specially designed storage tank. We have three tanks on site – made from one and half inch thick (just under four centimetres) titanium – which are regularly inspected to ensure proper operations. Two of those tanks have now been converted into vacuum storage tanks, capable of capturing the chlorine in the facility and storing it safely. The remaining tank is closely monitored, and inspections and maintenance are completed on a regular schedule.

## Employee training

***Overall training for all employees:*** At all of our sites, including our North Vancouver facility, we have strict safety protocols in place, starting at production and continuing through to our products reaching our customers. Our protocols include employee safety training, rigorous safety protocols and procedures throughout all stages of production, facility safety drills and emergency response planning.

***Emergency response training:*** In North Vancouver, we work closely and collaboratively with local first responders, including the North Shore Emergency Management. Part of our safety training includes emergency training where we simulate real world scenarios and test our processes and procedures to ensure all employees will be ready to respond in the event of an actual incident.

***Above:*** *Our facility and rail safety information station at our June 6, 2024, Open House session was a popular stop for residents wanting to learn more about everything we do to ensure the safety of our employees, and the community*

***CHLOREP Team:*** We also have an onsite, fully trained CHLOREP team. Our employees receive highly specialized training to respond to hazardous materials spills, including liquid chlorine. Our team is ready and able to respond to any spill in Western Canada, whether the incident involves a Chemtrade product or not. Oversight of these teams is maintained by the Chlorine Institute, who perform a site visit every two or three years, ensuring all team members are fully prepared to respond to any potential emergency involving chlorine or its by-products.

When an incident occurs and a contractor's assistance is required, industry officials and emergency responders can be assured that CHLOREP contractors have been thoroughly vetted and are subject to ongoing review. Under this program, verification teams comprised of representatives from chlorine producers, packagers, railroads, and Institute staff visit these contractors every two or three years (depending on the capability level) to ensure they are fully prepared to safely resolve potential emergencies. Contractors have substantial experience in responding to chlorine emergencies and can be either a Level 2 or Level 3 contractor.

## What would happen if there were to be an accidental release

We can confidently state the risk of a large accidental release of liquid chlorine at Chemtrade's facility is very low. Our facility is fully automated and can shut down and isolate any area of production as soon as any one of the 72 sensors located around the site trigger a reading (they can detect chlorine in concentrations as low as one part per million), or any of the equipment provides irregular readings.

We also have cameras located around the site, providing operators and our security team with the ability to visually monitor our site at all times.

Our control room is monitored 24 hours a day, seven days a week where our team closely monitors the operations of every aspect of our facility. These operators are in constant contact with employees working around the site discussing readings and general operations.

Our employees are trained on what to do in the case of an accidental release and regularly practice safety drills based on our emergency procedures and policies. We do this in partnership with local first responders – like Northshore Emergency Management and the District of North Vancouver Fire Department, to ensure all parties are ready and able to respond to a potential release should it occur.

***Above:*** *Tour members get a look at our control room, and the opportunity to ask our operators questions. This room is monitored 24 hours a day, seven days a week to ensure proper and safe operations of our facility*

**If an accidental release were to happen, several immediate actions and processes would be triggered:**

1. Operators would shut down and isolate the area of the facility where the leak was detected
2. The facility would sound the emergency alarm to notify employees and neighboring businesses
3. Employees would launch emergency response protocols which, depending on the location and severity, would include the donning of emergency response gear (rebreathers, protective gear and in some cases, self-contained breathing equipment – similar to scuba gear), evacuation, and sheltering in place
4. Local first responders would be notified and an alert to all Lower Mainland residents would be sent using Alertable. This message would include instructions on what to do – which would generally be to shelter in place, close windows and shut down heating or cooling devices.
5. Employees on site would work with First Responders and our own CHLOREP team to identify, stop and then begin mitigation work for any potential spills.
6. Updates would continue to be provided on the status of the leak, the containment efforts, and any required actions for residents through Alertable. Employees would also be contacting local elected officials and First Nations to provide updates. This would continue until we were able to give the all clear signal.
7. Following the incident, an investigation would be undertaken and the results, along with steps taken to mitigate any future potential incidents, would be shared publicly

## Do the new safety curves account for an earthquake, or other natural disaster?

As part of our plans to secure long-term operations for our North Vancouver facility, we are proposing several capital improvement projects that will further improve safety and reduce potential risk. The safety improvements we are proposing on-site include the construction of an enclosure around the rail car loading area, the removal of old infrastructure, the installation of seismic sensors, and other modernization projects. These projects, along with the substantial decrease in onsite storage of liquid chlorine – a reduction of over 99 per cent from levels stored on site in the year 2000 – are expected to have a positive impact on the reduction of the quantitative risk assessment (QRA) curves. ***The assessment looks at the implications from a full release of all liquid chlorine stored on site – regardless of the cause, whether it is from an earthquake, mechanical failure or human error.***


***Above left:*** *QRA cures developed in 2006 which reflect today's operations*
***Above right:*** *Updated draft QRA curves showing projected risk following completion of proposed safety projects and reduction of on-site chlorine storage*

## Where can I go to find more information?

We have a website dedicated to providing information regarding our operations in North Vancouver along with proposed safety improvements, detailed FAQs, all of our community newsletters, our public tour program, upcoming events, and ways to contact us: **www.AskChemtrade.ca**

## Ways to contact us

We would love to hear from you, and there are several ways to contact us:

- **Visit our newly updated www.AskChemtrade.ca** where you will be able to submit questions, find up-to-date information, and send us a message directly.
- Reach out to our Director, Corporate Communications Amy Jonsson at ajonsson@chemtradelogistics.com who will be able to answer questions or connect you with someone who can.
- Visit our Facebook page (https://www.facebook.com/chemtrade) and send us a message that way.