

**Chemtrade Logistics-ERCO Worldwide-Univar Solutions-GFL Environmental
North Shore Community Advisory Panel (CAP)
MEETING SUMMARY NOTES
Kenneth Gordon Maplewood School, 420 Seymour River Place North Vancouver**

**Meeting 4:30 pm to 6:30 pm
November 21, 2023**

Attendance

Owen Horn, Chemtrade Logistics

Dale Bossons, Chemtrade Logistics
Mark Maharaj, ERCO Worldwide
Robin Lee, Univar Solutions
Steve Spence, GFL Environmental
John Hawkes, NSEM
Stella Tsiknis, Kenneth Gordon
Maplewood School
Suzanne MacLeod, Kenneth Gordon
Maplewood School
John Miller, Lower Capilano Residents
Association
Babs Perowne, NVan Can
Stuart Meyer, Miles Industries
Alvictor Chan, Miles Industries
Stuart Porter-Hogan, Maplewood Area
Community Association (MACC)
Bruce Crowe, Inter River Community
Association
Carleen Thomas, Wild Bird Trust
Dave Mair, Resident
Robert J. Burns, Resident

Regrets

Andrew Van Eden, Tsleil-Waututh
Nation
Alex Adams, Blueridge Community
Association
Barbara Rennie, Blueridge Community
Association

1. Welcome and Introductions

CAP members introduced themselves and welcomed new attendees. Thanks was given to Kenneth Gordon Maplewood School for hosting tonight's meeting.

2. Review of September CAP meeting minutes

Members reviewed the September CAP meeting minutes. No edits to the original draft sent out after the meeting were noted. The facilitator will finalize the September meeting minutes and send them to DNV to post on their CAP information webpage.

3. Presentation: Operation Lifesaver on Rail Safety

Phil Breden, a volunteer with the organization, delivered the presentation.

He explained that Operation Lifesaver (OL) is a non-profit based in Ottawa and funded by Transport Canada and the Railway Association of Canada. It is made up of dedicated railroaders and citizens, who aim to save lives by educating Canadians about the hazards associated with railway tracks and trains. Their ultimate goal is to prevent collisions at railway crossings and railway trespassing incidents in Canada. They believe that all rail incidents are preventable.

Operation Lifesaver works in cooperation with the rail industry, governments, law enforcement, labour groups and many other safety-focused organizations and community groups.

There are approximately 50,000 railway crossings and close to 45,000 km of railway tracks in Canada. Every year more than 100 Canadians are seriously injured or killed as a result of railway crossing or trespassing incidents.

Phil explained the meaning of different warning signs, devices and signals. He said to always expect a train as you approach a railway crossing and that trains always have the right of way. A train whistle and bell, advanced warnings, pavement markings and an active crossing help alert us to the potential danger of a train.

He said it's important not to pass, shift gears or stop while crossing the tracks. And when approaching a crossing, to stop your car 5m from the tracks, and to keep that distance from the back of the car once having crossed. He also said you must never drive around lowered gates at a crossing.

It is easy to misperceive the speed of a train as because of their size, trains appear to be much further away and travelling much more slowly than they actually are. Because the average stopping distance of a train is 2km or more, they can't stop quickly. They are also not able to swerve.

He said being on or near railway tracks without permission is illegal even if there aren't any signs posted and can result in a fine.

Pedestrians should only cross tracks at designated railway crossings, or by using a pedestrian overpasses or underpasses.

Please see the attached presentation for more information and visit OperationLifesaver.ca.

CAP member questions

Under what conditions is the train whistle blown?

There are different municipal laws which govern this.

Who determines where they put the gates?

The railway will determine this.

Who made the law?

The federal government through the Railway Safety Act and regulations. Short line railroads have the same rules to follow.

Is there any organization who coordinates speeds?

They follow the Federal Railroad Association. There are common regulations for Canada, the US and Mexico.

How are fines issued?

It costs \$580 for trespassing. It is difficult to enforce as there are 45,000km of track and very few police officers.

What is the breakdown of the types of fatalities occurring?

Most is trespassing, some is suicide. These fatalities involve the general public rather than industrial accidents.

4. NSEM Update

John Hawkes said that NSEM has been having conversations with Chemtrade Logistics about notifications in the case of an emergency and the use of the Alertable app. He said any type of event that occurs is a communications piece, which involves educating people about what happened and how to shelter in place. He said NSEM has suggested the use of Connect Rocket which they use to connect with the Fire Department during emergencies.

5. Reports from the Companies

a) Chemtrade Logistics

Owen Horn reported that there are no new incidents to report, and that the plant's overall employee incident (OIR) rate is low compared to US BS and WorkSafe BC for the

2023 average, one year rolling average and 2 year rolling average. (See table in appendix for more details). He said this metric is used as it is a way to compare between companies and facilities. And Chemtrade tries not to focus too much on the number because there is some evidence that very low OIR is not necessarily related to protection against serious injury. He mentioned there have been 630 days since the last injury.

There are no safety incidents. There was a release from an Acid plant which hit the plant's fence line on the West side. The neighbours were not affected. Metro Vancouver and the BC MOE were notified. The plant was shut down until the investigation was completed. It looks like this was due to a material build up in the line which wasn't anticipated. Two HAZOPs have been completed since the last CAP meeting.

Owen said the plant's emergency drill on November 1st went well. When they went to test the Alertable system in the middle of the drill, they forgot to change the message, "This is a drill." The message went out to 8,000 people. They notified the Fire Department so they didn't respond and talked to their neighbours. Owen clarified that the notifications people would receive would include the horn and the Alertable app, no phone calls. They are looking at improvements to their systems to allow fast, seamless communication between Chemtrade, NSEM and DNV. They have hired Hailey Barry who used to work for the BC government to write their emergency response plans.

The plant met with the BC MOE on a comprehensive rewrite of their effluent permit to meet the new Burrard Inlet Water Quality Guidelines. They have consulted with the Tsleil-Waututh Nation and will consult with other stakeholders at a later stage.

CN damaged one of Chemtrade's HCl railcars at the Thornton yard which required their Chlorexp team to help them mitigate. There was no release of material.

There is currently a very high demand for Chemtrade's hydrochloric acid, and the plant continues to operate at very high levels of reliability. Mayor Mike Little recently visited the facility.

In response to a CAP member's question about keeping skilled labour, Owen said they have relatively low turnover with 5% of staff and 10% of operator turnover per year.

b) ERCO Worldwide

Brian Scott reported that ERCO employees and contractors continue to work safely. As of Nov 21, 2023, NV employees have worked 1232 days since the last Recordable safety incident (July 7/20) & 4703 days since the last Lost Time Accident (Jan. 05/11).

The fourth quarter outfall summary was sent to the BC MoE as per PE-395 requirements. All tested parameters were within permit limits. Air Compliance test results for Line 7, Line 8, and the EVS were submitted to Metro Vancouver on September 29th. All test results were within permit limits.

A revalidation PHA was held on the ERCO NV H2 Compression plant Oct 30 to Nov 3. A Technical Safety Rail Audit was completed Sept 18 with no findings.

The plant has run well since the last CAP meeting although they have had some issues receiving and shipping rail cars over the last few weeks. Acid washes were completed on L-8 on October 4 and L-7 on October 18. These are 15-hour partial plant outages to allow for maintenance work to be completed.

On November 17, a 3-dimensional model review of the proposed HTEC Hydrogen Liquefaction plant was led by Bantrel Engineering Co. A 3-day HAZOP study of the proposed Hydrogen Liquefaction plant was held from November 6 to 9 by Bantrel Engineering Co.

c) Univar Solutions

Robin Lee reported that there have been 1011 days since the last personal safety recordable, and 4797 days since the last DAWC (as of end of day February 19, 2024).

There have been no reportable incidents since the previous CAP meeting. The following incidents are of note:

First Aid - Operator incident during rail transloading

- An air impact tool used to remove and apply manway bolts on railcars had a bolt come loose during operation and hit the operator below their monogoggles
 - It was a first time occurrence
 - All wrenches will be rebuilt and a PM schedule added as appropriate
 - Incident review at tool box talk & safety meeting
 - Reminder to check tools before beginning work

Transportation - CN locomotive left on tracks

- CN switching timing meant a locomotive remained on their tracks overnight
- Locomotive remained running to keep air brakes operational

- Subsequently worked with CN to have them turn OFF locomotive and apply hand brakes instead

Robin clarified that the locomotive being left on the tracks overnight wasn't a safety hazard, that it has lockable doors and that CN was notified.

Site transloading volumes remain steady with a slight increase at the end of October. CN operations are such that cars continue to bunch in the Surrey Thornton yard causing less than ratable volumes though the site and challenges with obtaining cars for vessel loading. CN advises it is a combination of new "rest" rules for their workers, and traffic from the BN line to the south that is causing the issues.

Rail track maintenance work has been completed and the materials used were significantly upgraded (ties, continuously welded track) so ideally the track will have a longer lifetime and overall improve track safety.

Univar Solutions' Richmond facility warehouse and offices will be moving by end of year to the new location in Maple Ridge. The bulk tank farm will be transitioned in early 2024.

In response to a CAP member's question about keeping skilled labour, Robin mentioned that it is an issue for the site. As an example, normally at least 10 potential candidates would be provided for training orientation, but only 3 were available. The site continues to work with union and BCMEA to ensure enough operators are trained for site to run safely as needed.

d) GFL Environmental

Steve Spence reported that the refinery's semi-annual shutdown was in progress, lasting from November 19 to December 1.

The Facility continues to operate within permitted approvals and has operated lost time injury free since the last CAP report.

The following first aid incidents occurred:

- November 2 - Warehouse operator pinched finger removing straps from a flatbed truck. The employee received Band-Aid treatment from first aid and returned to work. The worker was advised to use the correct type of gloves for the job.

- October 12 - Yard operator stumbled and went down on one knee while on top of a tanker truck, scraped knee on grating. No injury and returned to work. The incident is discussed below.

Incidents:

- October 12 – significant near miss. A yard operator stumbled over a fall protection harness on top of a tanker truck. No major injury but could have fallen off the truck and received significant injury ‘dangling’ from a fall protection harness that was only attached to the truck lifeline. The tanker truck involved did not have retractable safety railings. Since this incident, the facility has upgraded access to its overhead gantry so that operators can properly access the top of this type of truck and clip their safety harness into an overhead track, designed to limit the fall arrest distance should there be an incident. This system will now be used for accessing all tanker trucks that do not have safety railings.
- Positive Indicators – GFL is focused on reporting positive indicators, which have been proven to reduce the occurrence of major incidents. Some of the PI’s that have been reported and corrected in the last 2 months are:
 - Missing plugs on caustic lines (replaced)
 - Pressure washing hose looks to be starting to fail (replaced)
 - Broken conduit found (scheduled for repair)
 - Ergonomic suggestions for railcar hatch opening and closing (evaluating)
 - Grating missing in water treatment sump (replaced)

An insurance/engineering Audit was completed in September. They are looking at an impairment program, what to do without water. Steve will speak about this at the next meeting. A draft of the Fire Plan update to GFL and current regulations was received on November 13. Once corrections have been made, it will be submitted to FDNV for approval.

6. CAP Outreach Discussion

Members agreed that the earlier meeting time seemed to generate more attendance and decided to continue with this earlier meeting time for now. Snacks would be provided instead of dinner in this case.

Members appreciated Kenneth Gordon Middle School as a venue within the company and the school offered to host future meetings. The new Fire Hall, Wild Bird Trust and Capilano College were suggested as alternative venues in the community. Chemtrade has

been in touch with the Squamish Nation and they have indicated they will reach out to CAP when ready.

Outreach to stakeholders with the impact zone of the companies as discussed in the last meeting is in process. The facilitator is compiling a list of these stakeholders and will reach out to the Health and Safety Committees with the CAP information before the next CAP meeting. The suggestion was made to reach out to managers of residential buildings as well.

7. Brainstorm on Presentation Topics for the Upcoming Year

Presentation topics are needed for the February and June CAP meeting as Univar Solutions will present on risk mitigation strategies in April 2024 in conjunction with a tour of the plant.

CAP members reviewed the potential presentation topics for the upcoming year generated at the last meeting and voted on their preferences as follows:

- Seaspan – response plan for spills – 10 interested
- Translink – moving people in and out of the area (planner) – 4 interested
- DNV – development and impact of traffic and focus on emergency plans – 13 interested
- Communications process – Chemtrade and NSEM – 8 interested

8. Meeting Close

The meeting ended at 6:40pm.

The next meeting will be held on Tuesday, February 20, 2024.



Community Advisory Panel (CAP) November 21st Briefing Notes

Responsible Care – Safety, Security, Transportation, & Environmental

Safety

- No new safety incidents to report since the last meeting.
- Below is a comparison of our Overall Injury Rate compared to other industries. This metric is used as it is a way to compare between companies and facilities.
- As a plant we try not to focus too much on the number because there is some evidence that very low OIR is not necessarily related to protection against serious injury.

Item	Rate	US BS (Inorganic Chemical Manufacturing)	WorkSafe BC (Acid, Base, Chemical, or Dye Manufacturing)
Employee OIR 2023 Average	0.00	1.2	0.97
Employee OIR 1 YR Rolling Average	0.00	1.2	0.97
Employee OIR 2 YR Rolling Average	0.47	1.2	0.97

Security

- No security incidents.

Process Safety

- We had a release from an Acid plant which hit our fence line on the West side. Metro Vancouver and the BC MOE were notified. It looks like it was due to a material build up in the line which wasn't anticipated.
- 2 HAZOPs completed since the last meeting

Environmental

- We met with the BC MOE on a comprehensive rewrite of our effluent permit to meet the new Burrard Inlet Water Quality Guidelines

Transportation

- CN damaged one of our HCl railcars at the Thornton yard which required our Chlorep team to help them mitigate. There was no release of material.

Plant Operations

- Very high demand for our hydrochloric acid right now.
- The plant continues to operate at very high levels of reliability.
- Mayor Mike Little came to the facility for a tour and a chat.



ERCO Worldwide

ERCO Worldwide Update - (since last CAP meeting on Sept 19, 2023) Nov 21, 2023

Safety

- ERCO employees and contractors continue to work safely. As of Nov 21st, 2023, NV employees have worked 1232 days since the last Recordable safety incident (July 7/20) & 4703 days since our last Lost Time Accident (Jan. 05/11).
- We have 0 staff members currently self-isolating due to covid-19.

Environmental

- The fourth quarter outfall summary was sent to the BC MoE as per PE-395 requirements. All tested parameters were within permit limits.
- Air Compliance test results for Line 7, Line 8, and the EVS were submitted to Metro Vancouver on September 29th. All test results were within permit limits.

Process Safety

- A revalidation PHA was held on the ERCO NV H2 Compression plant Oct 30 to Nov 3.
- Technical Safety Rail Audit completed Sept 18 with no findings.

Operations

- The plant has run well since our last meeting. We are having some issues receiving and shipping rail cars over the last few weeks.
- Plant completed acid washes on L-8 Oct 4 and L-7 Oct 18th. These are 15-hour partial plant outages to allow for maintenance work to be completed.

Proposed Clean Hydrogen Project

- A 3-dimensional model review of the proposed HTEC Hydrogen Liquefaction plant was led by Bantrel Engineering Co on Thursday Nov 17th.
- A 3-day HAZOP study of the proposed Hydrogen Liquefaction plant was held Nov 6-9 by Bantrel Engineering Co.

Brian Scott, P.Eng.
Plant Manager, North Vancouver

Univar Solutions report – November 21, 2023

Univar Solutions reported that there have been 920 days since the last personal safety recordable, and 4706 days since the last DAWC (as of end of day November 20, 2023).

There have been no reportable incidents since the previous CAP meeting. The following incidents are of note:

First Aid - Operator incident during rail transloading

- An air impact tool used to remove and apply manway bolts on railcars had a bolt come loose during operation and hit the operator below their monogoggles
 - First time occurrence
 - All wrenches will be rebuilt and a PM schedule added as appropriate
 - Incident review at tool box talk & safety meeting
 - Reminder to check tools before beginning work

Transportation - CN locomotive left on tracks

- CN switching timing meant a locomotive remained on our tracks overnight
- Locomotive remained running to keep air brakes operational
- Subsequently worked with CN to have them turn OFF locomotive and apply hand brakes instead

Site transloading volumes remain steady with a slight increase at the end of October.

CN operations such that cars continue to bunch in the Surrey Thornton yard causing less than ratable volumes though the site and challenges with obtaining cars for vessel loading. CN advises it is a combination of new “rest” rules for their workers, and traffic from the BN line to the south that is causing the issues.

Rail track maintenance work completed and materials used were significantly upgraded (ties, continuously welded track) so ideally the track will have a longer lifetime and overall improve track safety.

Our Richmond facility warehouse and offices will be moving by end of year to the new location in Maple Ridge. The bulk tank farm will be transitioned in early 2024.



CAP Meeting – November 21, 2023

Current Status / Schedule

- Semi-annual shutdown in progress - November 19 – December 1

Health, Safety and Environment

- Facility continues to operate within permitted approvals.
- Facility has operated lost time injury free since the last CAP report.
- First aid incidents:
 - November 2 - Warehouse operator pinched finger removing straps from a flatbed truck. Band-Aid treatment from first aid and returned to work. Worker advised to use the correct type of gloves for the job
 - October 12 - Yard operator stumbled and went down on one knee while on top of a tanker truck, scraped knee on grating. No injury and returned to work. Incident discussed below
- Incidents:
 - October 12 – significant near miss – Yard operator stumbled over fall protection harness on top of a tanker truck. No major injury but could have fallen off the truck and received significant injury 'dangling' from fall protection harness that was only attached to the truck lifeline. The tanker truck involved did not have retractable safety railings. Since this incident, we have upgraded access to our overhead gantry so that operators can properly access the top of this type of truck and clip their safety harness into an overhead track, designed to limit the fall arrest distance should there be an incident. This system will now be used for accessing all tanker trucks that do not have safety railings.
 - Positive Indicators – GFL is focused on reporting of positive indicators which have been proven to reduce the occurrence of major incidents. Some of the PI's that have been reported and corrected in the last 2 months are:
 - Missing plugs on caustic lines (replaced)
 - Pressure washing hose looks to be starting to fail (replaced)
 - Broken conduit found (scheduled for repair)
 - Ergonomic suggestions for railcar hatch opening and closing (evaluating)
 - Grating missing in water treatment sump (replaced)

Training and Audits

- An insurance/engineering Audit was completed in September.
- Fire Plan update to GFL and current regulations – draft received November 13. Once corrections have been made, it will be submitted to FDNV for approval