

**Chemtrade Logistics-ERCO Worldwide-Univar Solutions-GFL Environmental
North Shore Community Advisory Panel (CAP)
MEETING SUMMARY NOTES
Chemtrade Logistics, 100 Amherst Avenue, North Vancouver**

**Dinner & Meeting 6:00 pm to 8:00 pm
September 19, 2023**

Attendance

Owen Horn, Chemtrade Logistics
Brian Scott, ERCO Worldwide
Ed Bechberger, ERCO Worldwide
Emily Fattore, ERCO Worldwide
Margaret Hurst, ERCO Worldwide
Steve Spence, GFL Environmental
Racheal Mani, GFL Environmental
Robin Lee, Univar Solutions
Meraz Sekhon, Univar Solutions
John Hawkes, NSEM
John Miller, Lower Capilano Residents
Association
Barbara Rennie, Blueridge Community
Association
Stuart Meyer, Miles Industries

Regrets

Babs Perowne, NVan Can
Alex Adams, Blueridge Community
Association
Anastasia Ovodova, Port of Vancouver
Suzanne MacLeod, Kenneth Gordon
Maplewood School
Stella Tsiknis, Kenneth Gordon
Maplewood School
Dave Mair, Resident

1. Welcome and Introductions

CAP members introduced themselves and welcomed new attendees. The tour planned by GFL Environmental for tonight was cancelled due to the weather. A new date for the fall will be scheduled and sent out to CAP members who are interested in attending.

2. Review of June CAP meeting minutes

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

3. CAP Terms of Reference and Guiding Principles

Members reviewed the CAP Terms of Reference and Guiding Principles. There was a suggestion to add an indication of where the CAP minutes could be found into the CAP Terms of Reference. The facilitator will add this in.

4. CAP Evaluation Review

The facilitator reported that the eight CAP members present in person at the June CAP meeting completed the evaluation and 3 people completed the online version.

A. Feedback on presentations as below:

- HTEC on North Vancouver Liquefaction Project
- Risk mitigation strategies by Chemtrade Logistics
- Risk mitigation strategies by ERCO Worldwide

All of the presentations were viewed as valuable by those who attended. One comment was: “All are well thought out and informative, good information but not so detailed as to be overwhelming.”

B. Ideas for topics for the coming year:

- Safety-related.
- Improvement of a public danger alert system

C. Other feedback

Overall, CAP members who responded to the evaluation seemed satisfied with CAP organization, meeting culture and conversation with the companies. 10/11 respondents indicated they were fully satisfied with CAP organization and 1/11 was “sort of” satisfied. 9/11 were fully satisfied with CAP meeting culture, 1 was “sort of” satisfied. 10/11 were fully satisfied with the conversation with the companies and 1 was “sort of” satisfied.

Overall, there was only a sense of partial satisfaction with CAP involvement in the local community, community participation on CAP and community awareness of CAP.

Please see the appendix for the full evaluation results.

5. CAP Outreach discussion

Members discussed the following improvements to the CAP regarding community participation which were proposed in the June CAP meeting:

Stuart Meyer from Miles Industries suggested doing outreach to the Health and Safety committees of local businesses. There was discussion of rewriting the CAP one pager to appeal to these committees. The facilitator has created a cover letter to accompany the one pager for this purpose. There was the suggestion to compile a list of stakeholders within the impact zone of the companies. Health and Safety Committees also have bulletin boards where they could post the information about the CAP. ERCO is sending out a risk assessment brochure next month and could include the CAP one pager in this.

The idea was proposed to try and hold a CAP meeting at an earlier time, for example starting at 4:30pm, which may enable more people to attend. There was agreement to try this for an upcoming meeting (possibly in November) and see how it affects participation.

There was also the idea to host a meeting at Kenneth Gordon Maplewood School to encourage higher community attendance. The school staff have said they would be willing to host the meeting in November. The idea was proposed to inform teachers of the meeting and put up a poster about it in the school. Also, to specifically inform Science teachers at the school about the CAP and have students invite their parents.

The question was asked about how schools draw people out, and the comment made that people must perceive the risk as lower than the value of attending the CAP. The question was raised of what would success look like, and it was clarified that while the group would like increased participation in CAP, it's important to be able to have a group size which enables interactive discussion and member input. Also, that it would be good to have transition between CAP members with some leaving as new members come in.

John Hawkes mentioned he had ideas around engaging more people in the local government and communities and he would discuss these further with the CAP facilitator.

There was the suggestion for Chemtrade to advertise the drill they are doing on November 1st so other companies can participate, like Valor Fireplaces is doing.

6. GFL Environmental Presentation on Plant Risk Mitigation Strategies

The presentation was delivered by Plant Manager, Steve Spence and EH&S Compliance Manager, Racheal Mani. Steve explained that the GFL Environmental facility in North Vancouver was the world's first commercial scale re-refinery to use vacuum distillation and hydrotreating to recover base oil from used lubricating oil

The facility employs 42 trained staff and processes 42 ML of UMO annually. The company employs 20,000 people across North America.

It produces co-products including Fuels, VGO (Vacuum Gas Oil) and Asphalt Extender and produces 28ML base oils, 100N, 150N, 450N. The numbers indicate viscosity and "N" = neutral (not acidic or base). The highest volume product is 150N.

Steve explained that refineries make base oil then lubricants are blended from refined and synthesized products, including base oil(s), additives and VM (viscosity modifiers).

The facility sells 75% of base oils, the rest is blended into lubricants. It takes 10 barrels of crude oil to get 1 barrel of base oil and 1.5 barrels of used oil to make base oil.

For their effluent emissions of oil and grease, they need to be below 10PPM to leave the site.

Regulatory Risk Mitigation policies for the facility include:

- Operating under an Operational Plan administered by BC Ministry of Environment and Climate Change Strategy (RS-08511) with regulated limits to the amount and types of Hazardous Waste that can be stored and processed on-site.
- Requirement to treat Effluent Emissions (storm water) to below permitted levels for pH, Oil & Grease, Heavy Metals, Phenols and Sulfides.
- Requirement for air Emissions to be below permitted levels set by Metro Vancouver permit GVA 0254 with limits on flow rate, HCl, NO₂, SO₂, TRS, VOC, particulate and opacity.
- Regulated by Technical Safety BC (boiler and pressure vessels), Transport Canada (trucking and rail activity), Worksafe BC and CNSC (Canadian Nuclear Safety Commission)

Process Safety Management is comprised of policies, procedures and best practices designed to prevent incidents and GFL is committed to ensuring a safe workplace per their operational policies.

Meeting Summary Notes – September 19, 2023

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North Shore Community Advisory Panel (CAP)

Hazards are identified and mitigated using the following processes:

- HAZOP – Used during the design phase of new projects and periodic review of existing operations. It ensures all projects and processes are built to industry standard and all regulatory codes are met. All possible risks and hazards are identified and mitigation strategies are put in place.
- Work Permits – ensure all safety concerns are addressed before starting a job including lockout/tagout and isolation records.

Hazards are further identified and mitigated using these processes:

- Field Level Risk Assessment (daily check on risks of jobs)
- Job Hazard Analysis (non-routine tasks)
- Standard Operating Procedures (routine tasks)
- Job Task Observation (prove worker competency)
- Incident reporting / investigation of all incidents regardless of severity

Steve clarified that the Facility has no risk that exceeds the fence perimeter that will affect the community. This is still the case in any plans for expansion with the exception of ERCO Worldwide as the Facility's immediate neighbours.

Risk assessment activities include:

- 3rd Party chemical and noise exposure monitoring to ensure compliance with occupational exposure limits
- Maintain and use Exposure Control Plans for hazardous substances including solvents, oil mist, hydrogen sulfide and used oil
- 3rd party Property Risk Evaluation – provides a broader view of risks and identifies areas for improvement
- 3rd party Risk Assessment for potential expansion – determine if expanded production results in greater risk for workers and the community

GFL maintains an approved Emergency Response Plan (ERP) which outlines the response and reporting procedures to be used in the event of an unplanned incident.

In the event of an emergency the goals of the ERP are:

- Ensure immediate and ongoing care of all employees, contractors, and visitors

- Protect the immediate community surrounding the plant
- Protection of the environment
- Protection of equipment and structures

To achieve the goals of the ERP, GFL is committed to the following:

- Provide proactive measures to protect the site
- Ensure clear roles and responsibilities for all personnel
- Provide and evaluate training for all personnel related to their role and responsibilities
- Ensure clear communication and to all parties during an incident. Racheal Mani explained that all incidents go up to the VP, Western Canada, so there is a chain of people who see it.
- Provide all reasonable material necessary to achieve the ERP goals
- Ensure all ERP equipment is maintained in a state of constant readiness

Compliance verification includes the following:

- Daily, weekly, monthly inspections by GFL employees
- Client Audits – typically for Customers
- Regulator Inspections - Transport Canada, BC MOE, Metro Vancouver
- 3rd party audits to ensure compliance with regulations: biennial Environmental audit for compliance with the BC HWR and yearly Energy Safety Canada COR Audits

The GFL Environmental Western facility assists with displacing approximately 138,970 tonnes of greenhouse gas emissions. To put it in perspective, this is equivalent to:

- Annual emissions from 26,572 passenger vehicles, or
- 15,632,171 gallons of gasoline consumed, or
- 323,186 barrels of oil consumed, or
- Recycling 42,448 tonnes of waste instead of sending it to a landfill.

CAP member questions

Who are GFL Environmental's biggest customers?

The biggest customers are in the Prairies. One is in Saskatoon, and some are in the California corridor. GFL also sells and rebrands products to LORDCO. They also transport some to their new facility, the Heartland refinery in Columbus, Ohio.

7. NSEM Update

John Hawkes reported that NSEM has been busy focusing on the issue of unmet needs in emergencies and people disproportionately affected. They have been supporting community groups focused on people who are homeless and underhoused, people with disabilities and new immigrants, among others.

The fires that have occurred over this past year have been permanent displacement events and NSEM is putting in time and effort to support people affected. NSEM is also doing projects around heat mapping in municipalities, researching how to identify vulnerabilities during extreme heat events. The Resilience Project is a 2-year project being led by Lily Yumagulova, who may attend CAP meetings in the future.

NSEM has outstanding operational initiatives being led by Simon Als. They are also planning to do outreach in local communities which may include a workshop or symposium.

8. 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 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). It was clarified that this is the same as the TRIR (Total Recordable Incident Rate), ie. the number of recordable incidents per 100 full-time workers during a year.

There are no safety or process safety incidents. Chemtrade received the Platinum award from the Chlorine Institute for no new Process Safety Incidents.

There are no new environmental incidents or transportation issues.

Plant production rates are dropping as demand drops throughout North America, some of this is seasonal. The plant continues to operate at very high levels of reliability, with 97% overall equipment effectiveness.

b) ERCO Worldwide

Brian Scott reported that ERCO employees and contractors continue to work safely. As of September 19, 2023, NV employees have worked 1169 days since the last Recordable

safety incident (July 7/20) and 4640 days since the last Lost Time Accident (Jan. 05/11). No staff members are currently self-isolating due to Covid-19.

The Technical Assessment of the plant's effluent requested by the BC MoE is ongoing. So far, the samples from the effluent have proven to be nontoxic to several different organisms. On August 10, ARG performed Air Permit Compliance Testing of Line 7, Line 8, and EVS scrubbers was performed. All tests were within permit limits. Also on August 10, Metro Vancouver performed a routine site inspection. All permitted stacks were visited and no deficiencies were identified.

Due to the port strike by the International Longshore and Warehouse Union from July 1-13, ERCO NV plant reduced load.

Corrosion caused sections of the plant's 14-inch cooling water line to fail suddenly. The corrosion on the pipe was unexpected and went unnoticed since it was hidden behind a layer of insulation. The plant had to be shut down to allow for temporary repairs. During the period of July 17-21, the plant took a 4-day outage to replace the failed sections of pipe.

On July 10, a public hearing was held at the District of North Vancouver council chambers for an amendment to the bylaw to allow a Clean Hydrogen Production Facility at 100 Forester St, North Vancouver. The second, third and final reading was held and the application to amend the bylaw was passed. An HTEC Hydrogen Liquefaction HAZID study led by Bantrel Co took place on August 21 and August 24. An HTEC Hydrogen Liquefaction Constructability review, also led by Bantrel Co, took place on September 8.

c) Univar Solutions

Meraz Sekhon reported that there have been 857 days since the last personal safety recordable, and 4643 days since the last DAWC (as of end of day September 18, 2023).

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

Oil Sheen Reported by Vessel

- Oil sheen reported by vessel on the north side of the dock/dolphin
- Univar operations investigated but sheen dispersed quickly and source was not found
- Appreciated reporting by vessel

Caustic Truck Loading

- Incorrect quantity loaded

- Caught and corrected
- Root cause: Foreman error in transposing numbers for load quantity. Too much was loaded (over by 4,000L) because the foreman misread the amount.
 - Built in layers of protection avoided a worse incident
 - The incident was reviewed in tool box talks and safety meetings as to the importance of focusing on the task at hand

The Univar local site continues to lead the way in Behaviour Observations for any single Canadian site (116 YTD as of end of July).

Univar Solutions has updated its terminology to ESG (Environmental, Social, and Governance) formally called Sustainability because ESG better describes the Program which encompasses more than just the environment and many companies are moving towards using this description. More information can be found at: <https://www.univarsolutions.com/sustainability>.

On July 1, 2023, more than 7,200 dockworkers represented by the International Longshore and Warehouse Union began a strike that lasted until July 13th. There was some minor job action following the initial tentative agreement reached, but it was fully ratified on Friday, August 4th. Automation and wages were the issues of note. Labour action of this magnitude had not occurred since the 1980's when Pierre Trudeau mandated the dock workers back after 2 weeks of disruption. The parties' inability to settle the dispute was incredibly harmful to the economy and hit businesses both large and small, and both far and wide given the Port's significance in Canadian trade. Ideally leaders in all sectors will work towards ensuring this kind of disruption does not happen again.

The site is operating at steady rates, and maintenance projects are continuing.

d) GFL Environmental

Steve Spence reported that the refinery was running at 100% capacity. The semi-annual shutdown has been delayed to the first or third week of November.

The Facility continues to operate within permitted approvals and has operated lost time injury free since the last CAP report. There have been no first aid incidents.

There have been three near miss incidents over the period related to improper vessel cooling and purging prior to maintenance activities. Each of these near misses could have put workers at risk of temperature or chemical exposure. Each incident was identified by maintenance

workers and further steps were taken to reduce risk and avoid injury. Further actions have resulted in updated procedures for vessel preparation, isolation and lockout.

An insurance/engineering Audit is scheduled for September 19. A third party was contracted to complete a Fire Plan update to GFL, which was due back in August. This has been delayed due to issues with the contractor and the report is now expected in October.

There is consideration of doing a new life cycle analysis for the facility. This could cost up to \$100,000. One of the benefits would be that knowing what emissions could be saved would be good for potential marketing.

6. Brainstorm on Presentation Topics for the Upcoming Year

CAP members discussed potential presentation topics for the upcoming year, in addition to the presentation by Univar Solutions on risk mitigation strategies which will be done in April 2024 in conjunction with a tour of the plant.

The following topics were suggested:

- Live drill – tabletop scenario – It was pointed out that this is usually done to assess what went wrong in a given situation so CAP wouldn't be the appropriate forum for this
- Translink – moving people in and out of the area (planner) – 9 interested
- DNV – development and impact of traffic – 6 interested
- CN rail – Operation Lifesaver on railway safety – 11 interested
- Seaspan – response plan for spills – 10 interested

We will revisit this list at the next CAP meeting to give CAP members who weren't present an opportunity to add further ideas.

7. Meeting Close

The meeting ended at 7:55pm.

The next meeting will be held on Tuesday, 21 November23.

Community Advisory Panel (CAP) September 19th Briefing Notes

Responsible Care – Safety, Security, Transportation, & Environmental

Safety

- No new safety incidents to report since the last meeting.

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	0.48	1.2	0.97

Security

- No security incidents.

Process Safety

- No process safety incidents.
- We received the Platinum award from the Chlorine Institute for no new Process Safety Incidents.

Environmental

- No new environmental incidents since the last report.

Transportation

- No new transportation issues.

Plant Operations

- Plant production rates are dropping as demand drops throughout North America, some of this is seasonal.
- The plant continues to operate at very high levels of reliability.



ERCO Worldwide

ERCO Worldwide Update - (since last CAP meeting on June 28, 2023) Sept 19, 2023

Safety

- ERCO employees and contractors continue to work safely. As of Sept 19th, 2023, NV employees have worked 1169 days since the last Recordable safety incident (July 7/20) & 4640 days since our last Lost Time Accident (Jan. 05/11).
- We have 0 staff members currently self-isolating due to covid-19.

Environmental

- Technical Assessment of our effluent requested by the BC MoE is ongoing. So far the samples from our effluent have proven to be nontoxic to several different organisms.
- On August 10th, Air Permit Compliance Testing of the Line 7, Line 8, and EVS scrubbers was performed by ARG. All tests were within permit limits. On August 10th Metro Vancouver performed a routine site inspection. All permitted stacks were visited. No deficiencies were identified.

Operations

- ERCO NV plant reduced load due to the port strike by the International Longshore and Warehouse Union July 1st to 13th. The port strike effectively halting cargo transportation at the port.
- Corrosion caused sections of the plant's 14-inch cooling water line to fail suddenly. The corrosion on the pipe was unexpected and went unnoticed since it was hidden behind a layer of insulation. The plant had to be shut down to allow for temporary repairs. Then on July 17th to 21st the plant took a 4-day outage to replace the failed sections of pipe.

Proposed Clean Hydrogen Project

- On July 10th a public hearing was held at the District of North Vancouver council chambers for an amendment to the bylaw to allow a Clean Hydrogen Production Facility at 100 Forester St, North Vancouver. The 2nd 3rd and final reading was held and the application to amend the bylaw was passed.
- An HTEC Hydrogen Liquefaction HAZID study took place on August 21 and August 24th. The HAZID was led by Bantrel Co.

- An HTEC Hydrogen Liquefaction Constructability review took place on Sept 8th and this review was led by Bantrel Co.

Brian Scott, P.Eng.

Plant Manager, North Vancouver

Univar Solutions report – September 19, 2023

Univar Solutions reported that there have been 857 days since the last personal safety recordable, and 4643 days since the last DAWC (as of end of day September 18, 2023).

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Site is operating at steady rates, and maintenance projects are continuing.



CAP Meeting – September 19, 2023

Current Status / Schedule

- Refinery running at 100% capacity.
- Semi-annual shutdown scheduled for October 28 – November 3

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: none
- Incidents:
 - 3 near misses over the period related to improper vessel cooling and purging prior to maintenance activities. Each of these near misses could have put workers at risk of temperature or chemical exposure. Each incident was identified by maintenance workers and further steps were taken to reduce risk and avoid injury. Further actions have resulted in updated procedures for vessel preparation, isolation and lockout.

Training and Audits

- An insurance/engineering Audit is scheduled for September 19
- Fire Plan update to GFL and current regulations – 3rd party contracted to complete update, due back in August. This has been delayed due to issues with the contractor. Report is now expected in October.

**Chemtrade-ERCO-Univar-GFL
North Shore Community Advisory Panel**

**CAP Evaluation 2022/2023
Completed June 28, 2023**

1. Did you find the following presentations valuable?

	Yes	No	Didn't attend
HTEC on North Vancouver Liquefaction Project	10		1
Risk mitigation strategies by Chemtrade Logistics	6		4
Risk mitigation strategies by ERCO Worldwide	11		

2. Please provide any additional feedback you have on the presentations above.

- Presentations are first class
- Most important info. Reason to attend!
- Prefer to see presentations from 3rd party agencies (not companies) such as CN, NSEM, Metro, Port, etc.
- All are well thought out and informative, good information but not so detailed as to be overwhelming.

3. What topics would you like to have presentations on in the coming CAP year?

- Safety-related.
- Improvement of a public Danger alert system

	ABSOLUTELY	SORT OF	NOT AT ALL	NO ANSWER
As a CAP member, how satisfied are you with:				
CAP meeting organization.	10	1		
CAP meeting culture – opportunity for all to participate	9	1		
Conversations with the companies.	10	1		
CAP involvement in the local community.	1	9		
Community participation on CAP.	5	6 (1 between absolutely and sort of)		
Community awareness of CAP.	3	5	1	
What are your suggestions for changes to CAP? -Re post CAP; re-print one pager for new residents -More community outreach; dinner – Skip the Dishes -Create a CAP “Health and Safety” website featuring CAP members and Maplewood -Increase diversity of participants -I think it is well run, but that many community members aren't aware of it - not sure how to address this in general, personally I just keep trying to pass info along for our community newsletters. -Let us consider holding the meeting in the Maplewood residential area such as the Kenneth Gordon Elementary school				