

100 Amherst Avenue

Public Hearing – June 16, 2026

Application to amend the Zoning Bylaw to allow the continued use of the site for the manufacturing, processing, liquefaction, handling, storage, loading and shipping of chlorine, subject to conditions.

Rezoning Bylaw 8778





Site Context

Located In Maplewood's heavy industrial area

Summary of Key Concerns from Last Public Hearing

- Public safety
- Rail transportation related off-site risk
- Risks related to seismic & flooding
- Emergency preparedness including shelter-in-place
- Questions around alternatives to liquid chlorine
- Land use compatibility and permanence nature of the proposal

Add - New Pre-Liquefier & Condenser Tower (~80 ft)

Add - Enclosed Rail Loading Building (with EVS)

Add - EVS Waste Hypo Tank Farm

Remove - Old Cell House (unused since 2007)

Remove - 60-tonne Bulk Chlorine Tank

Keep - Rail Yard

Keep - Retaining Wall

Keep - Salt Storage

Keep - Pipe Bridge & Upgrades

District Land
Port Land

What Has Changed?

In the revised application, the applicant proposes the following key changes:

- ☐ Time-limited and conditional approval framework
- ☐ Future QRA reviews and Best Achievable Technology review
- ☐ Additional public shelter-in-place training

Lastly, the applicant provides clarifications for security, emergency preparedness, and other matters.



Revised Application: Time-Limited Approval

- ☐ Chlorine operations would be time-limited and tied to the Vancouver Fraser Port Authority lease.
- ☐ Proposed end date: earlier of December 31, 2046 or termination of the Port lease.



Revised Application: Future QRA and BAT Review Requirements

☐ **Validation QRA prior to Building Permit issuance**

- ❖ Prepared by BakerRisk based on detailed project plans and specifications.

☐ **Baseline QRA following completion of safety upgrades**

- ❖ Prior to occupancy permit or final inspection, confirming the Facility, including Chlorine Operations, as constructed meets MIACC Standards and validation QRA.

☐ **Periodic QRA reviews**

- ❖ Updated QRA 8 years after the Baseline QRA, and a further updated QRA 10 years after the Baseline QRA.

☐ **Independent Best Achievable Technology (BAT) review**

- ❖ Approximately 15 years after bylaw approval to assess whether the Facility continues to reflect BAT for risk mitigation and operational safety.

☐ **Security vulnerability assessment**

- ❖ Prepared by an independent qualified professional and provided to the District on a confidential basis.

Revised Application: Proposed Timeline



DNV Staff Response to the Revised Application: Section 219 Covenant and QRA Oversight

☐ Staff rely on professional reports such as the QRA and peer review

- BakerRisk QRA indicates a significant improvement of risk contours based on the applicant's proposed safety-oriented capital improvements.

☐ Section 219 Covenant

- Secure completion of proposed safety upgrades according to the reduced level of risks in the BakeRisk QRA.
- Secure validation QRA before Building Permit issuance.
- Secure Baseline QRA before occupancy/final inspection.
- Secure future QRA reviews after Baseline QRA is established.
- Secure related safety, reporting, review, and compliance obligations.
- Others such as additional confidential security study and commitment to fund and support public safety education

☐ Next Step

- If Council gives Third Reading, staff would begin preparing the covenant, to be fully in force prior to final adoption.



Figure 3 from BakerRisk QRA: LSIR Geographical Risk Contours

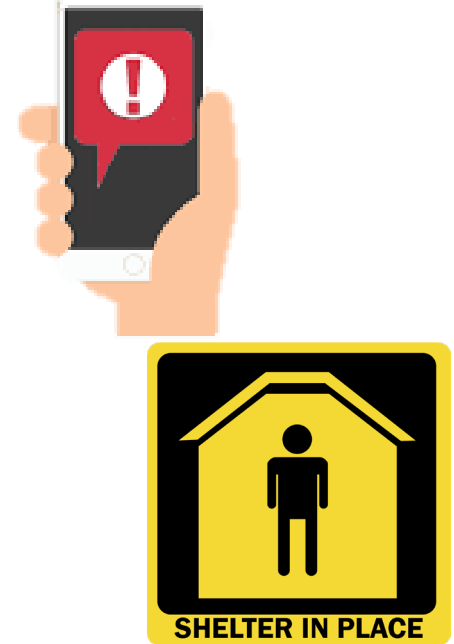
Applicant Revised Application: Emergency Preparedness and Public Education

☐ Applicant proposes a four-pronged approach:

- Educational brochure with shelter-in-place instructions
- Annual shelter-in-place training in partnership with local first responders
- Community Advisory Panel “train-the-trainer” workshops
- Emergency response and preparedness training for Tsleil-Waututh Nation

☐ Applicant also clarifies safety processes already in place:

- Continued coordination with DNVFRS and North Shore Emergency Management
- Support for the Chlorine Institute’s CHLOREP emergency response program



DNVFRS Role in a Chemtrade Emergency

DNVFRS responsibilities – life safety focus

- Initial incident assessment, scene control, and life safety
- Evacuation or shelter-in-place support and public safety coordination
- Integration with NSEM, NVCFD, RCMP, BCEHS, CANUTEC, CHLOREP, and other specialized agencies

Chemtrade responsibilities

- Facility operations, internal emergency response plan, and technical product information
- Containment, employee safety, and specialized resources such as plume modelling

Hazardous materials capability

- DNVFRS no longer maintains a technician or operations-level hazmat response capability; the role is now awareness-based
 - defensive and coordination focused (hazard recognition, isolation, exposure protection, water cooling where appropriate)
- Offensive actions (leak control, product transfer, plugging, patching, or entry into contaminated areas) require specialized responders such as NUCOR Environmental Solutions or NVCFD

Risk, Preparedness, and Key Actions

Why this matters

- Chlorine release near surrounding industrial and residential areas makes ongoing coordination and preparedness a priority
- A major chlorine release is rare, but its consequences could be significant and will quickly exceed fire department and municipal resources

If a release occurs

- Early activation of the Emergency Operations Centre (EOC), coordinated public notification, and engagement of external specialized resources
- Preparedness must extend beyond operational response to public awareness, education, and clear pre-incident communication with residents, businesses, and neighbouring industry

Key actions

- Keep emergency plans current
- Confirm public notification and shelter-in-place procedures
- Continue joint training and exercises
- Consider neighbouring industrial operations and cascading risks
- Identify any staffing or funding support required to sustain this work

Chemtrade Touchpoints: Training & Inspections

Training

- **2026** – Chemtrade ERT attended SCBA and extrication training at the Maplewood Fire Facility with DNVFRS instructors, four times (Jan 13, Jan 23, Feb 10, Mar 16).
- **2025** – DNVFRS Training Captains and Technical Rescue instructors completed an on-site rescue assessment for the chlorine line repair project.
- **2024** – 40 firefighters (engine crews) toured several areas of operation, including the chlorine loading rack, reviewing plant staff and CHLOREP response capability and the support needed in the event of a release.
- COVID limited regular training through 2022; joint activities have been resumed since.

Inspections

Our inspectors were on site at least once a year.

- **2021 – 3:** Inspection 3/11/2021, plus two follow-ups.
- **2022 – 2:** Inspections
- **2023 – 1:** Reinspection
- **2024 – 1:** Updated the preplan.
- **2025 – 2:** Inspection 2/28/2025
- **2026 – 2:** Reinspection 6/8/2026; Inspection 6/9/2026.

Chemtrade Touchpoints: Incidents (2021–2025)

Year	Total Incidents	Breakdown by Call Type
2021	2	Fire Miscellaneous
2022	3	Alarms Ringing ×1, Medical Aid ×1, Public Assistance ×1
2023	9	Structure Fire ×1, Alarms Ringing ×6, Medical Aid × 2
2024	5	Alarms Ringing ×4, Medical Aid ×1
2025	7	Structure Fire ×1, Alarms Ringing ×3, Medical Aid × 3

26 incidents recorded across five years (2021–2025); most were alarm activations and medical aid calls, not chlorine releases.

NSEM Response: Emergency response procedures

- ✓ Established NSEM–Chemtrade emergency response procedures are in place
- ✓ Chemtrade’s designated technical representative confirms the incident level and provides technical information to support public safety messaging
- ✓ NSEM uses this information to coordinate public notifications (including Alertable) and response coordination with emergency partners as required
- ✓ Where protective action is required, Shelter-in-Place instructions are included in public messaging

Public Hearing Records

- Full Public Hearing package available to Council and the public
- Includes staff reports, technical studies, QRA/peer review, referral comments, and public input
- Consolidated Q&A prepared for questions received after the February Public Hearing

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Staff

- Dan Millburn, GM, Planning, Properties & Permits
- Mike Danks, Fire Chief
- Gunter Kramer, Deputy Fire Chief
- Yan Zeng, Manager, Development Planning

Vancouver Fraser Port Authority

- Shaun Govender, Director, Government and Stakeholder Relations
- Claudia Leung, Manager, Real Estate

Applicant Team

- Alan Robinson, Group Vice President Commercial
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