Public health review of Woodfibre LNG air emissions

November 23, 2026

Dr. Moliehi Khaketla
Medical Health Officer, Coastal Rural | Vancouver Coastal Health
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Cc: HealthProtectionCG@vch.ca

Dear Dr. Khaketla,

Sound Moms is a group of mothers and neighbours in Britannia Beach, across Howe Sound from the Woodfibre LNG facility. We ask Vancouver Coastal Health (VCH) to review air-emissions application 455458 and provide its public health recommendations to the BC Energy Regulator (BCER) before the November 29 comment deadline. [1]

We also worry about the health of the wider Howe Sound ecosystem. Its biosphere region is home to about 721 native land animal species and thousands of marine species, including the glass sponges that build reefs beneath these waters. [14]

We ask VCH to recommend an enforceable condition requiring 12 consecutive months of independent, continuous air-quality monitoring in Britannia Beach before any flaring begins, including commissioning flaring. Monitoring should continue through commissioning and operations, with results publicly available.

A local baseline would tell families what they are breathing through all four seasons. It would let clinicians and public health officials compare readings during an event with those recorded in the same community under similar winds and seasonal conditions. Once flaring begins, the opportunity to collect that pre-flaring record is gone.

B.C.’s dispersion modelling guideline identifies a fully instrumented station operating continuously for at least one year as ideal when establishing a baseline monitoring program. It allows other approaches. Section 14 of the Environmental Management Act gives the permit director discretion to require monitoring, studies and reporting. We ask VCH to advise how those powers should be used here. [2–3]

Woodfibre reports that predicted concentrations fall below the applicable objectives for the contaminants and scenarios assessed. Its thermal oxidizer outage scenario assumes two events per year totalling 96 hours. During a trip, certain streams are diverted to the flare system and vented. What could reach Britannia homes if an outage lasts longer or recurs when winds carry emissions across the Sound? [1, 4]

We ask VCH to address the following questions in its submission.

Questions for Vancouver Coastal Health

1. Which measurements represent Britannia Beach? Please identify the pollutants, locations, dates, seasonal coverage and gaps in the baseline. If readings from Squamish or elsewhere are used, what evidence shows they represent conditions where Britannia children live and play? What short-term concentrations are predicted at these locations during commissioning and extended outages?

2. What must the independent monitoring program measure? We propose that Woodfibre fund a qualified independent operator, that the BCER approve the plan, and that the operator publish results without company approval. Please advise on monitor siting, local weather measurements, data completeness and detection limits. Should the plan include nitrogen dioxide, fine particles, sulphur compounds and individual volatile organic compounds such as benzene? Which require continuous readings or event-triggered laboratory sampling? [4–12]

3. When will families receive health advice? Existing facility permit condition 18 allows notice within 24 hours after an unplanned flaring event starts if it exceeds the stated volume or duration threshold. What circumstances warrant earlier advice, including during venting or shorter events? Please identify who should notify residents, schools, childcare providers and clinicians, what precautions to take and when they can end. We request public flare and vent start and stop times alongside provisional readings and subsequent quality-checked results. [13]

If VCH has already reviewed the application, please share its public recommendations. If more time is needed, please file interim comments identifying questions that should be resolved before a permit decision. The published route is **info@wlng.ca**, copying **waste.management@bc-er.ca**, referencing application 455458. [1]

Could you please confirm by **Friday, November 27**, who will lead VCH's response and what we may share at our November 29 community meeting? Families would welcome the opportunity to hear directly from your team.

Sincerely,

Kristi L. Kremers

Kristi L. Kremers
Founder, Sound Moms • Britannia Beach, B.C.

Co-signatories

We are Britannia Beach residents who work in health care. We support a Vancouver Coastal Health review and a full year of independent air-quality monitoring in our community before any flaring begins, including commissioning flaring.

Arianna Cruz
MBA, MA, BEng | Employee at Vancouver Coastal Health

Dr. Erica Dibb-Fuller
MB BCh, FANZCA, FRCPC | Pediatric anesthesiologist at BC Children's Hospital

Vesna Ennis, RMT

Dr. Paulina Gasiorowska
MD, CCFP (EM), ABAARM Diplomate

Dr. Marisa Leon Carlyle
MD, MSc, FRCPC

Dr. Mélissa Nadeau
Orthopaedic Spine Surgeon, MD, MHSc, FRCSC

Darlene Secong
Registered Psychiatric Nurse, MPH

Michèle Tamplin, PT
Physiotherapist, Beach Physio

Rossco Thomas
Advanced Life Support Paramedic and Firefighter

Klaudia Van Doorn
MSW, RSW | Employee of Fraser Health and Vancouver Coastal Health

Addendum A • Permit record and operating experience

[1] BCER • Environmental Protection Notice, application 455458
The notice describes commissioning, baseline and cumulative scenarios, including shipping and the compressor station. Its predictions apply to the scenarios, pollutants and locations assessed. The Squamish Nation notice gives November 29 as the comment deadline.

[2] B.C. Air Quality Dispersion Modelling Guideline, section 8.1.3, p. 71
A continuous station operating for a year is described as ideal when establishing a monitoring program. Shorter or passive studies may be appropriate. Independence, local siting and completion before commissioning flaring are safeguards requested by Sound Moms.

[3] Environmental Management Act, section 14(1)(c)–(d)
The director may specify how monitoring is carried out at places affected by a discharge and require studies and reporting. A condition can identify where measurements are taken, when the program begins and who must report.

[4] Environmental Protection Notice, p. 3, note (e)
During a thermal oxidizer trip, acid gas, high-pressure flash gas and condensate vapour are routed to the flare system and vented. The model assumes two trips totalling 96 hours per year. We ask VCH to identify health-based benchmarks and predicted levels at residential locations.

[5] Stantec for LNG Canada • Kitimat flaring assessment, October 27, 2025
After higher-than-authorized gas flow to a warm wet flare was disclosed, the BCER requested updated dispersion modelling, comparison of ambient readings with flare rates, and review of the monitoring plan. This equipment issue provides a documented B.C. precedent for checking predictions against operational data.

We ask VCH to obtain dated outage logs, gas composition and stream-specific emission rates from the regulator to assess how actual operating conditions compare with the model.

Kitimat acid gas incinerator outage

The Tyee reported that the acid gas incinerator serving one of LNG Canada's two production units was offline for 139 days between September 2025 and April 2026. One outage lasted two consecutive months. The report draws on monthly air emissions records obtained through a freedom of information request. We ask VCH to assess what a prolonged outage at Woodfibre could mean for families in Britannia Beach when winds carry emissions across Howe Sound.

Source: The Tyee, July 20, 2026

Related coverage: CBC News on flaring at LNG Canada

Addendum A • Health evidence and monitoring

[6] Analysis of Flaring Activity at LNG Export Facilities Worldwide
Ten years of satellite observations across 48 facilities distinguish commissioning and start-up from later operations. These data establish why timing matters. Determining neighbourhood exposure requires measurements on the ground.

[7] Assessing Near-Source Health and Equity Impacts of LNG Terminals
Modelling at other terminals estimated spatial differences in nitrogen dioxide exposure and potential health effects, including childhood asthma. The estimates depend on local operations and meteorology. Britannia warrants its own residential assessment.

[8] Health Canada • Ambient nitrogen dioxide risk assessment
Controlled studies found respiratory effects in adults with asthma. Population studies linked ambient nitrogen dioxide to asthma emergency visits. A 2021 meta-analysis by Zheng et al. also found associations with short-term nitrogen dioxide, sulphur dioxide and ozone. Ask which averaging periods can detect clinically relevant episodes.

[9] Health Canada • Canadian Health Science Assessment for Fine Particulate Matter
Fine particles are associated with respiratory and cardiovascular effects. People with asthma and other heart or lung conditions are of particular concern. Pair particle readings with wind, regional smoke conditions and event times to investigate sources.

[10] Gauderman et al. • Lung development in children (2015)
In three cohorts totalling 2,120 children, improvements in regional air quality were associated with better lung growth from ages 11 to 15. This longitudinal evidence supports tracking exposure trends through operations.

[11] Cushing et al. • Flaring and birth outcomes in South Texas (2020)
At least ten nightly flare detections within 5 km over a pregnancy were associated with higher odds of preterm birth (OR 1.50, 95% CI 1.23–1.83; after adjustment for well count, 1.41, 1.11–1.69). Stratified associations appeared among Hispanic women. This upstream observational study cannot quantify risk at an LNG export terminal.

[12] Prenatal air pollution and birth outcomes • Umbrella review (2022)
Across 36 reviews, reduced birth weight showed a more consistent association with prenatal fine-particle exposure. Results varied by pollutant and outcome. The evidence supports including pregnancy in local exposure assessment.

[13] BCER • Woodfibre LNG facility permit, condition 18
For flaring exceeding 10,000 cubic metres per event or four hours, notice is required at least 24 hours before planned events or within 24 hours of unplanned onset. VCH can advise when health protection requires an earlier alert.

[14] UNESCO | Howe Sound Biosphere Reserve
https://www.unesco.org/en/mab/atlka7tsem/howe-sound