



November 20, 2020

Julie Green
Ministry of Environment, Conservation and Parks
135 St Clair Ave W
Toronto, ON
M4V 1P5

To Julie Green

Re: Environmental Registry of Ontario # 019-1134 – Proposed amendments to regulations under the Environmental Protection Act and the Environmental Assessment Act for combined heat and power systems that use natural gas or wood biomass as fuel

Thank you for considering this letter to the Ministry of Environment, Conservation and Parks with comments on Ontario's proposed amendments to approvals for combined heat and power (CHP) systems. The comments are being submitted by QUEST's Ontario CHP Consortium, a diverse group of industrial and commercial customers, utilities and technology and service providers committed to advancing Combined Heat and Power (CHP) as an energy efficient, resilient and low GHG option for Ontario.

QUEST and the members of the Ontario CHP Consortium would like to thank the Ministry for proposing to streamline approvals for low risk CHP applications using natural gas and biomass. We are supportive of the proposed changes and would like to commend the Ministry staff that clearly put a lot of thinking and work into the proposal that has been posted to the Environmental Registry of Ontario.

This strong effort shows that the Government of Ontario understands the important role these generation sources play in Ontario's energy system and economy, and the minimal impact CHP has on the environment. At this critical time in Ontario, it is more important than ever to reduce red tape, help drive investment and get the economy moving. And streamlining environmental approvals for lower risk CHP helps protect the environment by focusing the Ministry's limited resources of approval engineers and subject matter experts on higher risk applications deserving of their attention.

We do wish to put forward a few recommendations that we feel would strengthen your regulatory proposal for consideration:

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*Executive Director /
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- ✓ **Recommendation #1:** Increase the Exemption threshold for Low Risk Micro Systems to 1 MW. Additionally, require these installations to include a declaration or attestation by a Licensed Engineering Practitioner (LEP) to be kept onsite, confirming that compliance of the Ministry's NPC-300 noise limits is met as demonstrated by noise propagation modelling.

Setting a 1 MW limit to qualify for an Exemption as a Low Risk Micro System would significantly reduce regulatory burden on low risk facilities looking to implement CHP systems without adding significant additional risk of adverse environmental impacts.

The CHP Consortium members support the need to reference the California Air Resources Board (CARB) requirements, and additionally we recommend that these exempt facilities include some form of declaration or attestation onsite showing that noise propagation modeling was completed by an LEP and that the applicable noise limits will not be exceeded.

Further rationale for increasing the exemption limit to 1 MW are provided by other relevant examples:

- CARB has exemptions listed on their website of up to 1.4 MW
- 750 kW was used for emergency generators as a capacity limit as an exemption, and many of these facilities use diesel as a fuel resulting in worse air quality emissions and are not required to reference CARB noise requirements
- 1 MW is consistent with the limit Hydro One sets for facilities to install additional equipment such as a remote trip relay
- Many government buildings, small hospitals, schools and colleges, and small manufacturing have stable loads between 500 kW and 1MW, and reducing regulatory burden would help them better manage energy and improve resiliency through CHP, for example by establishing emergency warming areas in local community centres

- ✓ **Recommendation #2:** Regarding the requirements that micro-systems be California Air Resources Board (CARB) certified in order to qualify for an exemption, we understand that only CHP systems that are to be installed in California can legally be called "CARB-certified". In order to still reference the CARB certification for systems to be installed in Ontario, we recommend the Ministry instead use language to say that to qualify for the exemption systems must be "CARB equivalent" or something similar.

- ✓ **Recommendation #3:** We recommend that if a CHP that would qualify for an exemption at a stand-alone facility was to be installed at a small hospital or other such facility with

an existing Environmental Compliance Approval (ECA), that a formal amendment to their existing approval not be necessary and instead a note to file in their ECA be sufficient.

The rationale for this recommendation is that this process of writing notes to file at facilities with an existing ECA already applies to emergency generators that are similarly exempted from seeking a formal approval.

✓ **Recommendation #4:** We understand that the Ministry intends to update the Environmental Activity and Sector Registry (EASR) Publication to include Lower-Risk Small CHP Systems and that the testing requirements included in the updated Guideline A-5 will be incorporated into the EASR Publication. We recommend removing the requirement for a 2-year performance assessment when elements of Guideline A-5 will be applied in the EASR Publication. Instead, we recommend that a performance test is required to be conducted whenever major servicing of the CHP system is required, typically 5 to 10 years after installation.

The CHP Consortium members support the requirement for an initial test upon installation of the new system to ensure that the unit was commissioned properly and is running as designed. However, instead of a standard 2-year testing regime, we recommend that a performance assessment is required when a system is overhauled or is subject to major servicing. This will ensure testing is done when there is most likely to be an actual change in performance and emissions.

The rationale for this recommendation is that emissions of small CHP systems are not expected to change after installation unless there is an equipment failure or problem. Facility operators would detect system failure based on decreased power output and/or increased fuel consumption, indicating there was an issue with the engine. This recommendation applies only to the small CHP system testing requirements to be added to the EASR Publication, and not to the testing requirements outlined in Guideline A-5 for Higher-Risk Large Systems.

To help support this change, we recommend that CHP system providers/suppliers specify that their engineering group has provided a warranty to confirm the equipment is expected to operate regularly until a specific date, at which servicing is required.

Regarding biomass CHP systems, the proposed changes do appear to remove the requirement of a Renewable Energy Approval (REA), which acted as a real barrier, especially for smaller systems. Removing the REA requirement eliminates a key barrier and represents a positive step forward to seeing the deployment of renewable biomass energy systems. Biomass heat and power are among the lowest cost renewable energy systems that can

supply stationary energy demand in Ontario. Biomass CHP is a high efficiency, low cost renewable energy system that can provide deep reductions in carbon emissions across the entire stationary energy space.

The recommendations put forward in this submission are informed from decades of experience and subject matter expertise of the QUEST Ontario CHP Consortium members and are premised on the rationale that CHP should be part of any viable long-term GHG reduction strategy for Ontario. Specifically:

- CHP can reduce GHGs from less efficient and more polluting central thermal plants and enable wind, solar and other renewables;
- CHP improves community resilience to climate change and extreme weather events; and
- CHP improves energy affordability and increases the competitiveness of Ontario industry.

CHP is a proven, cost-effective technology that has played a critical role in keeping Ontario's manufacturers competitive and has sustained good, local jobs that otherwise would have left the country.

We strongly urge the Ministry of Environment, Conservation and Parks to continue with their efforts to streamline approvals for CHP and reduce regulatory burden on facilities looking to implement CHP. Doing so will support the government's objectives of reducing GHGs, enhancing community resilience, and providing for economic growth and good jobs for Ontarians.

Representatives of QUEST's Ontario CHP Consortium are available and interested in meeting with you and your team to discuss how CHP can do more for Ontario. We look forward to hearing from you.

Thank you for your consideration,

A handwritten signature in cursive script that reads "Tonja Leach".

Tonja Leach,
Executive Director, QUEST