

Proposal to remove the heat input threshold from the *Air Quality Regulation*

Stakeholder Engagement Report

This document is intended to serve as the Department's response to Stakeholder concerns and comments received to date with respect to this proposal.

Proposal Background:

Section 4 of the *Air Quality Regulation – Clean Air Act* states:

“Notwithstanding any other provision of this Part, no approval is required for fuel burning equipment in which the fuel burned is No. 2 fuel oil, natural gas, propane, butane or wood and in which the heat input never exceeds 2,700,000 kilojoules per hour.”

Since the establishment of this threshold in 1997 the Department has determined that it is set extremely low, requiring the Department to issue approvals for very small facilities with low levels of emissions and with little potential to significantly impact air quality.

It is proposed that the above heat input threshold be removed from the *Air Quality Regulation – Clean Air Act*, and be replaced with a policy-based emission-output threshold set for Sulphur Dioxide (SO₂) and Particulate Matter (PM). This proposed policy threshold is: SO₂ – 10 tonnes/yr and PM – 10 tonnes/yr.

The recommended proposal would result in removing the approval requirement for heating plants with annual emissions below 10 tonnes for both SO₂ and PM (Class 4). Heating plants with higher levels of emissions (Class 3 through 1A) would still require an approval.

Removing the requirement for these approvals is not expected to result in any measurable environmental impact. Departmental resources dedicated to these approvals will be redirected towards other more proactive environmental protection initiatives.

Stakeholder Engagement:

The Department has sought comments on this initiative from various stakeholders, including environmental non-government organizations (ENGO's) and current operators of small boilers that would no longer require an approval under this proposal.

The consultation process was conducted in two phases. First, a request for written comments on the proposal was sent out in September 2011. Resulting comments were reviewed and we identified a need to meet with interested ENGOs, to further the discussion. This meeting took place on November 30, 2011.

Comments and responses from both phases of the consultation are included in this report.

Written Submissions.

The following represents a summary of written comments, concerns and questions received, as well as the Department's response.

- 1) How many sources are subject to the current regulation? How many of these are fuelled by natural gas, wood/biomass, #2 fuel oil, propane or butane? Please provide examples of some sources that use wood biomass as fuel.**

Response. There are currently 74 small heating plant facilities that hold a Class 4 Approval. These 74 approvals would be eliminated should the proposal proceed. Of these facilities only one has a wood waste boiler. Natural gas is not available to the northern part of the province so those facilities use # 2 fuel oil and facilities in the southern part use natural gas or #2 fuel oil.

The UNB Fredericton Heating Plant, Edmundston Regional Hospital, and Chaleur Regional Hospital are some examples of facilities that burn biomass. These heating plants are larger than Class 4 and would continue to be regulated through the Industrial Approvals Program.

- 2) This decision would exempt operations that emit less than 10 tonnes/yr of SO₂ and 10 tonnes/yr of PM. Is it an AND situation or is it OR?**

Response. This is an "or" situation. Facilities emitting greater than 10 tonnes/yr of either SO₂ or PM would require an approval.

- 3) Will the Department require an initial stack test to determine what SO₂ or PM are being emitted in order to exempt a facility?**

Response. No. Emission levels are estimated using calculations based on fuel consumption.

4) Concerns regarding small sources were raised, especially when wood biomass is used as the fuel, such as:

- a. The Department will no longer have any legal authority over them.**
- b. Concerns about cumulative impacts resulting from multiple small sources in a localized area.**
- c. Small wood biomass burning units such as those used in schools and hospitals are on the increase.**
- d. Concerns that even low levels of pollution can harm respiratory health. By removing the heat input threshold, it could potentially allow several small facilities to operate without having to have any approval from the department.**

Response.

- a. It is anticipated that this proposed regulation change will have no impact on how we deal with wood/biomass burning facilities at the industrial level. These facilities typically have high enough emissions of PM to be captured under our Approvals process. For those few that would be exempted under this proposal (currently only 1 in the province), regulatory control can still be gained through ambient standards, smoke density regulations and the issuance of Ministerial Orders.
- b. The types of facilities included in this proposal are well dispersed, reducing this potential. If such impacts are suspected in the future, the Department can use portable air quality monitoring equipment or existing air quality monitoring stations to determine if ambient air quality standards are being exceeded. If so, the situation can be addressed as discussed in item (a) above.
- c. The Department has not seen an increase in the number of small heating plants using wood biomass as a fuel in NB to date. Should wood biomass become a more regular source of heat, the Department could address potential cumulative impacts as per (a) and (b) above.
- d. It is not expected that this proposed change will result in increased emissions to the environment. We currently issue approvals to these facilities simply because there is this regulatory requirement to do so. Removing the regulatory requirement is not anticipated to change the way that these facilities operate nor is it expected to encourage an increase in the number of facilities in this sector.

Although the Department of Environment will no longer issue approvals to these small heating plants, we will continue to be vigilant with this sector. Should specific concerns arise with respect to these facilities (such as

cumulative effects of multiple small wood biomass burners in a localized area) the Department will take necessary measures to avert any negative air quality impacts.

Other initiatives with respect to wood smoke:

In October 2010, the Canadian Council of Ministers of Environment (CCME) tasked its Air Management Committee to prepare a report on best practices to reduce emissions and associated health effects from wood-fired heating appliances. This “Residential Wood Combustion Code of Practice” will focus on indoor and outdoor residential wood burning appliances. New Brunswick is leading this initiative, which is expected to be available in summer 2012 and used by jurisdictions to inform our approach to address wood smoke issues.

Stakeholder Engagement Meeting – November 30, 2012

The following represents a summary of the Stakeholder Engagement Meeting, including the information presented and questions asked.

Present:

- Roshini Kassie, Manager, Community Outreach, NB Lung Association
- Mark Langford, Approvals Engineer, ENV
- Mark Glynn, Manager, Industrial Processes, ENV
- Darrell Welles, Manager, Air Quality Section, ENV
- Chandra Clowater, Coordinator, Stakeholder Education and Engagement Branch, ENV
- Jennifer Welles, Director, Standards Setting/Program Operations and Enforcement, ENV
- Mark Miller, Manager, Standards Section, ENV

Regrets:

- Gordon Dalzell, President, Citizens’ Coalition for Clean Air
- Conservation Council of New Brunswick

Presentation: A copy of the presentation is attached.

Meeting Notes:

- Department staff made a presentation outlining the proposal and rationale. (Copy attached).
- During the presentation a question was asked to provide examples of Class 4 Air facilities. Examples provided included small boilers at schools, some smaller hospitals, and office buildings for facilities that are included in this proposal.

- Comment provided during presentation. Operating conditions in Class 4 approvals for small heating plants are not restrictive, so removing the requirement to have an approval for these facilities will have no impact on their operations.
- Staff provided an update on the CCME initiative addressing wood smoke. In addition to the information on the slide in the attached presentation it was mentioned that NB Environment is the CCME Champion for this initiative and just recently, the contract for a consultant to prepare a report (based in part on recent work by Ontario) had been awarded to Levelton Consultants Ltd from Vancouver, BC.
- Following the presentation, the following questions and comments were shared.
 - *Question: Of the approximately 74 facilities that will no longer require an approval as a result of this proposed change, what are the number of facilities that use natural gas vs #2 Fuel Oil vs wood waste?*
 - Response: Only one of these facilities has a wood waste boiler. Natural gas is not available to the northern part of the province so those facilities would use # 2 fuel oil and the southern part would be a mix of natural gas and #2 fuel oil.
 - Comments/Concerns:
 - NB Lung Association's concern is with respiratory health and especially when these facilities are at or near schools and hospitals.
 - Removal of the heat input threshold may encourage facilities to select cleaner burning fuels. For example, a facility could switch to a cleaner fuel, reducing their SO₂ and PM emissions below the threshold, resulting in a situation where they would no longer be subject to the administrative burden of the approval process and associated approval fees.
 - If there is a complaint or an ambient air quality issue, there remains the option of issuing Ministerial Orders to get facilities to put in additional controls. This compliance tool allows the department to target "problem" facilities outside the limitations of approval conditions. At present, there are no "problem" facilities included in this proposed change.
 - Class 4 boilers are usually equipment that are bought as a package and assembled and operated according to manufacturer's procedures. There is little to no likelihood that these boilers could be retrofitted to use alternative fuels such as wood waste or heavier fuels as they are simply not designed for these alternative fuels.
 - *Question: Does the Department expect any change in air quality with this change?*
 - Response: The Department does not expect there will be a negative impact to air quality in NB as a result of this proposed change. The Department currently issue approvals to operate for these facilities because there is a regulatory requirement to do so.

- Removing the regulatory requirement will not cause any changes in the way that these facilities currently operate.
- Removing the administrative burden of issuing these approvals will allow the Department to reallocate resources to other important environmental management work. Departmental staff will be able to spend more time with facilities that are bigger contributors to air quality issues/concerns.
 - *Question: Would there be an opportunity to change (i.e. tighten) the new proposed policy based emissions thresholds for SO₂ and PM in the future, if needed.*
 - Response: Yes, this is certainly an option if the proposed emissions thresholds are determined to be inadequate.

Next Steps:

After issuing these meeting notes, interested parties will be provided a one week period to submit follow-up comments and concerns, after which the Department will finalize and put forward the proposal to remove the heat input threshold requirement from the *Air Quality Regulation*. Please note that all stakeholder concerns will be represented as part of the proposal.

Should this proposal be accepted by Government, there will be opportunity through the Government of New Brunswick's Public Engagement and Consultations website for the public to provide comments prior to final implementation of the proposed regulatory changes.

The Department commits to keeping interested stakeholders informed on the progress of this proposal and a notification will be sent out when the Draft Regulation is posted for public review.

Please contact Mark Miller (453-8932; mark.miller@gnb.ca) with questions, comments, or concerns.