

Proposal to Remove the Heat Input Threshold from the Air Quality Regulation

Department of Environment

November 30, 2011

What is the “heat input threshold”?

Wording in the *Air Quality Regulation* (AQR) that reads:

“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”

Proposed Action:

- To remove “heat input threshold” and replace with a policy-based threshold focusing on facility emission output
 - SO₂ – 10 tonnes/year
 - PM – 10 tonnes/year

Air

Class	Process Gas Flow <i>m³/min, actual</i>	SO₂ <i>tonnes/year</i>	Particulate Matter <i>tonnes/year</i>	Annual Fee <i>(due 1 April)</i>
1A	—	>1000	>1000	\$60,000
1B	>3000	251-1000	251-1000	\$28,000
2	601-3000	101-250	101-250	\$5,000
3	31-600	11-100	11-100	\$1,000
4	0-30	0-10	0-10	\$500

No approval is required for fuel burning equipment in which the fuel burned is #2 fuel oil, natural gas, propane, butane or wood and in which the heat input never exceeds 2,700,000 kilojoules per hour. 4 AQR

The release of gas solely from the combustion of fuel to generate heat or steam shall not be taken into consideration. 25(2) AQR

If an approval for a source requires the installation of equipment designed to control, reduce or eliminate the potential release of contaminants other than sulphur dioxide or particulate matter, the source shall have its class increased by one class unless it is in class 1. 25(3) AQR

Rationale

- A business decision – Small heating plant Approvals are high in administrative work in relation to overall environmental protection gained
 - Free up staff time to concentrate on areas of ‘higher’ environmental impact
 - Still would have Regulatory control over Small Heating Plant sector through Ambient Standards, Smoke Density and Ministerial Orders
 - NB has a lower threshold in comparison to some other provinces (i.e. Nova Scotia and Newfoundland)
 - Since establishment of the AQR boilers have improved in design and efficiency, reductions to sulphur levels of fuels, and cleaner burning fuels like natural gas have been introduced

Impacts

- Resources (staff time)
 - Would result in elimination of Approvals for 74 small heating plants (include some schools, hospitals, office buildings, and warehouses)
 - Savings of 7 person-weeks of staff time
- Environmental
 - Operation of a small heating plant is not significantly influenced by the conditions in their Approval
 - Given this, removing the requirement for an Approval is not expected to result in any measurable environmental impacts

Impacts (cont.)

- It is anticipated that the proposed regulation change will have no impact on how we deal with wood/biomass burning facilities at the industrial level
 - When wood is the primary fuel source, PM emissions typically fall within our higher class ranges (i.e. Class 3 or higher) and will still be issued Approvals to Operate

Note: CCME Initiative addressing woodsmoke

- 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 of wood-fired heating appliances
- The report is intended for use by jurisdictions to inform their approach to addressing woodsmoke issues.
- “Residential Wood Combustion Code of Practice” which will focus exclusively on residential wood burning appliances (indoor and outdoor)