

COMBUSTION EQUIPMENT DATA SHEET

The following information should be included to expedite the processing of the application for a Certificate of Approval. If more than one piece of combustion equipment is being applied for, please fill out one of these data sheets for each piece of equipment or include the information contained below in a summary table.

1. Please provide a brief description of the piece of combustion equipment being applied for. (e.g., boiler, heater, generator, etc.)

2. Indicate what the equipment has been rated at. (i.e., kW, BTU/hr, kJ/hr)

3. Identify the fuel being used. (e.g., natural gas, No. 2 fuel oil, diesel oil)

4. What will be the hours of operation for the proposed equipment?

5. Please provide exhaust emission information, exhaust flowrate (m³/s) and temperature (°C), if available. Include equipment data sheet, if available.

6. Please provide a **scaled** drawing of the following:
 - building dimensions of all buildings on the property;
 - building height(s) or elevation plans;
 - property lines;
 - surrounding land usage (i.e., commercial, residential, industrial, etc.)
 - location of the proposed equipment and its corresponding exhaust stack(s);
 - height of stack above roof, height of stack above grade, stack diameter;
 - location of the nearest on-site openable window/door and nearby air intake(s) from the stack (if residents/sensitive receptors are located on-site);
 - location of the nearby neighbouring buildings (i.e., beyond the property line) including the height of those buildings and the location of any air intakes or openable windows;
 - location of any sensitive receptors nearby (i.e., hospital, school, nursing home, day care centre).

7. If there are any other sources of nitrogen oxides (i.e., other than the equipment being applied for) on-site please refer to "Procedure For Preparing An Emission Summary And Dispersion Modelling Report, June 1998" and provide the emission summary and stack information for these sources as well.

8. If there are any existing residential receptors, or any other points of reception such as schools, hospitals, etc., or any residentially zoned lands, within a 500 metre radius of the proposed equipment/facility, please refer to the Mandatory Noise Information Request Form for Fans/Air Moving Devices or Diesel/Gas Generator Sets.

**INFORMATION FOR PROPONENTS
APPLYING FOR A CERTIFICATE OF APPROVAL (AIR)
FOR COMBUSTION EQUIPMENT**

Section 9 of the Ontario Environmental Protection Act, R.S.O. 1990 (Act) requires that anyone who constructs, alters, replaces or extends anything that may discharge a contaminant to the natural environment, other than water, is required to obtain a Certificate of Approval from the Director before the construction, alteration, replacement or extension takes place. As a result, no person may install and operate equipment, such as combustion equipment, that discharge to atmosphere without first obtaining a Certificate of Approval. Combustion equipment must also comply with Guideline A-9 - "NO_x emissions from Boilers and Heaters. However, please note that under O. Reg. 524/98, Certificate of Approval Exemptions - Air, fuel burning equipment used to provide comfort heating in a building does not require a Certificate of Approval (Air) if :

- the equipment uses no fuel other than No. 2 fuel oil that has a sulphur content of 0.5 percent or less measured by weight, propane or natural gas; and
- the total thermal input of all the fuel burning equipment that is used to provide comfort heating in the building is less than 1.58 million kilojoules per hour.

Detailed information on approval requirements and procedures, are contained in a separate document entitled "Guide for Applying for Approval (Air), Section 9, Environmental Protection Act, R.S.O. 1990, Environmental Assessment and Approvals Branch, January 2000". This document is available on the Ministry of Environment's web site (www.ene.gov.on.ca) or can be obtained by contacting Client Services at (416) 314-8001.

EMISSIONS and CRITERIA FOR APPROVAL - COMBUSTION EQUIPMENT

The contaminants of concern being emitted to atmosphere from combustion equipment are nitrogen oxides. Impacts from nitrogen oxides emission sources are required to comply with the point of impingement limit of 500 micrograms per cubic metre - maximum ½-hour average. This point of impingement limit is administered under Ontario Regulation 346 - General Air Pollution, where a typical point of impingement location is interpreted to be a nearby air intake and/or a property-line. However, in addition to compliance with the point of impingement limits, Section 14 of the Ontario Environmental Protection Act prohibits the causing of an adverse effect, such as odour impacts. Some proposed installations may require a detailed noise assessment, depending upon the size of the exhaust fan/equipment and proximity to residential receptors. The following provides a summary of the regulatory and guideline assessment criteria for a proposed source that is equipped with combustion equipment.

INFORMATION REQUIREMENTS - APPLICATIONS FOR COMBUSTION EQUIPMENT

The Combustion Equipment Data Sheet identifies the necessary information that is required by the Ministry to assess an application for Certificate of Approval (air). The inclusion of all on-site sources of nitrogen oxides is of particular importance for verifying compliance with the point of impingement limits. A scaled site plan, including elevations and surrounding land usage, is also important to facilitate the conversion of emission estimates to a predicted point of impingement impact for subsequent comparison to the point of impingement limits administered by Ontario Regulation 346 - General Air Pollution.

If you have any questions regarding the approvals process, please feel free to contact our Client Services representatives at (416) 314-8001.