Coal-Fired Power Boiler Emission Guidelines

All thermal-powered generation projects, as well as existing facilities that are undergoing significant modifications, are required to install control technologies that will meet emission guidelines.

Depending on the project, a more stringent control of emissions beyond the guidelines listed here may be required.

Limits for Gaseous and Particulate Emissions from New Coal-Fired Boilers

Parameter	**Limit**	**Units (1)**
Total Particulates	26.5	ng/J (output)
Nitrogen Oxides (2) as NO2	191.7	ng/J (output)
Sulphur Dioxide (2)	222.2	ng/J (output)
Opacity	20	% opacity
Mercury (3)		
Coal Type	**Percent Capture in Coal Burned* (%)**	**Emission Rate* (kg/TWh)**
Bituminous Coal	85	3
Sub-bituminous Coal	75	8
Lignite	75	15
Blends	85	3

Notes:

1. The values for Total Particulates, Nitrogen Oxides and Sulphur Dioxide are on a 30-day rolling average basis.
2. Same as the Canadian Council of Ministers for the Environment's Canada-wide Standards for Mercury Emissions from Coal-fired Electric Power Generation Plants, which states: "A new coal-fired [electric power generation] (EPG) unit will achieve a capture of mercury from coal burned no less than specified or an average annual mercury emission rate no greater than specified [in the table]".

Continuous monitoring of sulphur dioxide, nitrogen oxides and oxygen or carbon dioxide contents in the flue gas will be required. Any additional monitoring and source testing requirements will be determined by the Ministry of Environment on a case-by-case basis.

No limits have been specified for polycyclic aromatic hydrocarbons or certain other reactive substances. Appropriate specifications will be established by the Ministry of Environment should such a need develop. The degree of control necessary for polycyclic aromatic hydrocarbons or certain other reactive substances may also require a further reduction of total particulate emissions.