

Certificate of Approval (Air) Permits

What is a Certificate of Approval (Air) Operating Permit?

A Certificate of Approval (CofA, Air) permit is issued by the Ontario Ministry of the Environment (MOE), allowing the regulated discharge of contaminants into the natural environment.

What is a Contaminant?

A contaminant as defined in the Environmental Protection Act is any solid, liquid, gas, odour, heat, sound, vibration or radiation that may cause an adverse effect.

When is a CofA (Air) Operating Permit required?

Section 9 of the Environmental Protection Act, Revised Statutes of Ontario, 1990, Chapter E.19. states that a MOE issued operating permit is required before you operate, install or modify equipment that discharges, or is likely to discharge, contaminants into the natural environment. In addition, approval is required before you make changes to existing equipment and processes if those changes could alter the rate or manner of discharge of contaminants.

Ventilated welding and paint booths, natural gas fired processes, emergency power generating equipment, cooling towers, HVAC units, storage silos, liquid storage tanks, pollution control devices, and plastic extrusion are examples of exhaust sources that would require approval. In addition, general plant exhaust fans that move contaminated plant air out of the building would also be included in this category. Additionally if you change product formulations or relocate or modify exhaust stacks or processes approval will likely be required.

The wording of Section 9 is quite broad and most industrial processes or modifications to industrial processes and equipment will require MOE approval unless explicitly exempted.

What is a Grandfathered Source?

The EPA came into effect in 1972. In 1988 section 9 (7) was added that prohibits the use or operation of a plant, structure, equipment apparatus, mechanism or thing for which a CofA is required. Consequently, **equipment that was installed prior to 1972 and has remained unchanged since then is “grandfathered”**. Equipment installed thereafter is not grandfathered.

Regardless of the grandfathering status, when seeking approval for new equipment and modifications, all sources at the site must be considered when assessing site wide compliance. The MOE will not include the grandfathered source in the approval, consequently, there will be no terms or conditions to satisfy as long as the source remains unchanged.

What is a Consolidated Approval?

There are 3 types of air approvals: individual, consolidated, comprehensive. A Consolidate Certificate of Approval is applied for when you wish to get a single approval for the site; when you want to consolidate all individual approvals into a single approval; when you want to approve all sources that discharge the same contaminants; when you want to approve or group all common sources so that you save on MOE review fees.

A Consolidated approval reflects the current conditions at the facility and must be amended if the rate or manner of discharge is altered from the permitted value. For example, if you want to install a new exhaust system or process that will discharge contaminants either directly or indirectly to the air, you will have to amend your CofA before you can implement the changes.

Consolidated approvals are well suited for companies that do not make frequent changes or additions to their processes or product formulations. Consolidated approvals do not expire and do not have to be amended until you plan changes. The real disadvantage of the Consolidated approval is that if you need to amend your approval it can take close to a year (or longer) to be reviewed and approved by the MOE.

What is a Comprehensive Approval?

A Basic Comprehensive CofA provides some operational flexibility in that it does not have to be amended each time a process change is implemented as long as the facility stays within the production caps that are defined in the application. For example, if you manufacture widgets and your production cap is 10,000,000 widgets per year, you can implement process and production changes without seeking MOE approval as long as the manufacturing rate does not exceed the cap, you maintain environmental compliance (air and noise) and you revise and maintain your Emission Summary and Dispersion Modelling (ESDM) report (i.e. living document).

The Basic Comprehensive approval is granted for a period of 5 years after which it can be renewed, or if you choose not to renew it, it will default back into a Consolidated approval that must be amended when before you make changes.

Although a Comprehensive CofA offers flexibility, there is a requirement for annual reporting to the MOE and on-going costs if you retain the services of a consultant. Despite these issues, if you need to implement changes quickly due to the dynamics of your operations then a Comprehensive CofA is recommended and the added reporting and costs are worthwhile. However, if changes are not frequently made, and you can tolerate prolonged MOE approval review periods, and you consider your operations more static in nature, a Consolidated CofA is recommended.

Are There Exemptions to Certificate of Approval (Air) Permitting?

Yes, Regulation 524/98 provides approval exemptions for some activities that pose no significant risk of environmental impact. Some exemptions that may be relevant to industry include:

- Fuel burning equipment (No. 2 fuel oil, propane, natural gas) used to provide comfort heat if the aggregate thermal

input is less than 1.58 million kilojoules per hour (1.5 million BTU/h)

- On-site construction equipment
- Food / restaurant exhausts
- Plumbing ventilation
- Aqueous detergent cleaning operations
- Building air intakes and exhausts

What is an ESDM Report?

ESDM is an acronym for Emission Summary & Dispersion Modelling Report. In June 1998, a document titled Procedure for Preparing an Emission Summary and Dispersion Modelling Report was released by the MOE for use by industry and consultants to promote reporting uniformity and improve submission quality. The ESDM report format has now become an industry standard.

What Is the Streamlined Review Unit (SRU)?

The SRU is a unit of the MOE that has been setup to 'fast-track' the approval for designated equipment or processes that have known and easily quantifiable environmental impacts. Currently applications pertaining to Emergency Generator Sets (commercial, institutional and municipal facilities only), Combustion Equipment (commercial, institutional and municipal facilities only) and Automotive Paint Spray Booths are under the purview of the SRU.

What are the Consequences of Not Having a Certificate of Approval

If a company is found to be operating without a Certificate of Approval the MOE can issue a letter that requires the company to apply, they can impose Control Orders and Stop Orders requiring the company to reduce or stop the emissions, and if convicted of an offence under the Act the company can be fined and individuals can be fined or imprisoned.

How will O. Reg. 419/05 Impact my Operation?

O.Reg. 419/05 Air Pollution – Local Air Quality requires a person who discharges or causes or permits the discharge of a contaminant into the air to ensure that the off-property impact complies with the concentration limits provided in Schedules 1, 2, & 3 of the regulation and the on-site and annual reporting requirements. Demonstration of compliance is facilitated through the use of MOE approved atmospheric dispersion models and an Emission Summary and Dispersion Modelling report (ESDM).

The regulation is being phased-in through three stages – depending on a facility's

NAICS Code	O. Reg. 419/05 Schedule 4 - Target Sectors for 2010 Compliance
2122	Metal Ore Mining
221112	Fossil-Fuel Electric Power Generation
324110	Petroleum Refineries
3251	Basic Chemical Manufacturing
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing
3311	Iron and Steel Mills and Ferro-Alloy Manufacturing
331410	Non-Ferrous Metal (except Aluminum) Smelting and Refining
3315	Foundries

NAICS Code	O. Reg. 419/05 Schedule 5 - Target Sectors for 2013 Compliance
3221	Pulp, Paper and Paperboard Mills
324190	Other Petroleum and Coal Products Manufacturing
325	Chemical Manufacturing
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing
3279	Other Non-Metallic Mineral Product Manufacturing
331	Primary Metal Manufacturing
332	Fabricated Metal Product Manufacturing
336	Transportation Equipment Manufacturing
5622	Waste Treatment and Disposal

Phase-In Dates For Approved Atmospheric Dispersion Models

Type of Facility	30-Nov-2005	01-Feb-2010	01-Feb-2013	01-Feb-2020
Existing Facility not in Schedule 4 or 5	346 Models	346 Models	346 Models	US EPA Models
Existing Facility in Schedule 4	346 Models	US EPA Models	US EPA Models	US EPA Models
Existing Facility in Schedule 5	346 Models	346 Models	US EPA Models	US EPA Models
New Facility not in Schedule 4 or 5	346 Models	346 Models	346 Models	US EPA Models
New Facility in Schedule 4 or 5	US EPA Models	US EPA Models	US EPA Models	US EPA Models

Phase-In Dates For Contaminant Impact Limits

Type of Facility	30-Nov-2005	01-Feb-2010	01-Feb-2013	01-Feb-2020
Existing Facility not in Schedule 4 or 5	Schedule 1	Schedule 2	Schedule 2	Schedule 3
Existing Facility in Schedule 4	Schedule 1	Schedule 3	Schedule 3	Schedule 3
Existing Facility in Schedule 5	Schedule 1	Schedule 2	Schedule 3	Schedule 3
New Facility not in Schedule 4 or 5	Schedule 1	Schedule 2	Schedule 2	Schedule 3
New Facility in Schedule 4 or 5	Schedule 3	Schedule 3	Schedule 3	Schedule 3
Facility requesting and obtaining a S. 20(4) (speed-up) Notice	Schedule 3	Schedule 3	Schedule 3	Schedule 3
Facility given a S. 20(5) Order	N/A Can't give an order until 2010	Schedule 3	Schedule 3	Schedule 3

NAICS code (Schedule 4 and 5 of the Regulation – see below). The phase in period will span 15 years, beginning Nov. 30, 2005 and lasting through to Feb. 1, 2020. As of Feb. 1, 2020, all facilities will be required to use MOE approved atmospheric dispersion models and adhere to Schedule 3 standards.

New Facilities are immediately impacted by the regulation. New Facilities are loosely defined as those where construction began after November 30, 2005 and where no application for a Certificate of Approval was made on or before that date.