

**PROTOCOL FOR UPDATING
CERTIFICATES OF APPROVAL
FOR WASTE MANAGEMENT**

April 2002



Ministry of the Environment

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INTRODUCTION

The Ministry of the Environment (the “Ministry”) has a broad mandate of restoring, protecting and enhancing environmental quality in Ontario. Certificates of Approval (CsofA) are one way that the Ministry works to achieve its environmental protection objectives.

For the first time, the Ministry has documented its Protocols for Updating CsofA to provide a “one stop” information source on *how* and *when* CsofA are updated through a continuous improvement cycle. These Protocols will:

- ❑ Clearly communicate to clients in the regulated community and to the public the Ministry’s objectives and processes for updating specific types of CsofA.
- ❑ Outline the Ministry’s current priorities for updating CsofA that it reviews. While these may change over time, this information will assist clients to understand which CsofA are more likely to be considered for updating.
- ❑ Improve the administration of the approvals process by encouraging consolidation of CsofA.
- ❑ Actively encourage pre-application consultation with clients to explain the environmental protection requirement of the project.
- ❑ Promote consistency in the approvals process.
- ❑ Provide opportunities for public transparency in Ministry decision making and foster continuous improvement.

These Protocols for Updating CsofA will continue to take a balanced approach that looks at both the benefits of enhanced performance requirements *and* the cost of implementing new requirements to achieve those benefits.

While the Protocols outline the Ministry’s approach for updating CsofA, the Director’s decision is made on an individual basis using his or her discretionary authority in the application of the Protocol.

The Ministry has produced four *Protocols for Updating Certificates of Approval*, each targeted to one of the following environmental media:

- ❑ Sewage Works
- ❑ Air Emissions
- ❑ Water Works
- ❑ Waste

Each Protocol contains the same basic information regarding the overall review process and is customized for the specific type of Certificates of Approval.

This is the *Protocol for Updating Waste Certificates of Approval* ("Protocol").

Information in the Protocol is organized in four sections:

- Introduction
- What Are Certificates of Approval?
- Protocol for Updating Waste Certificates of Approval
- Assessment Criteria for Waste

Additional information can be obtained from:

Ministry of the Environment
Environmental Assessment and Approvals Branch
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

Telephone: (416) 314-8001 or Toll Free: 1-800-461-6290
Fax: (416) 314-7030

Or visit the Ministry website at: www.ene.gov.on.ca.

What are Certificates of Approval?

Certificates of Approval are required by the *Environmental Protection Act* and the *Ontario Water Resources Act* for specific activities related to sewage works, air emissions, waste management activities and water works.

The primary purpose of CsofA is to assess potential impacts to the environment as early as possible in the planning phase of a facility so that appropriate environmental standards are in place from the beginning of its operation to:

- Protect human health and the environment by preventing potential harmful effects.
- Require a facility to conform to generally accepted engineering practices with the potential to operate reliably.
- Provide minimum requirements for compliance with Ministry standards as set out in acts, regulations, policies, objectives and guidelines.
- Outline minimum responsibilities of facility owners and operators.

Each CofA is site-specific and tailored to the individual circumstances and characteristics of the facility and its local environment. The CofA places legally-binding requirements on the owner/operator of the facility intended to prevent or manage environmental impacts.

A CofA reflects the Ministry's environmental protection requirements in effect at the time it is issued. New environmental protection requirements continue to be developed over time and are reflected in Ministry policies, guidelines, procedures, and legislative/regulatory frameworks. One of the purposes of this Protocol is to formalize a continuous improvement cycle so that existing CsofA keep pace with these changes.

Protocol for Updating Waste CsofA

What are the Objectives of the Protocol?

The assessment of the existing CofA is done using the criteria described in this Protocol (discussed in the next section), based on input from Ministry field and technical staff. The review will determine the extent to which the CofA meets the following requirements:

- Current environmental standards, guidelines and policies.
- Standard up-to-date operating requirements.
- Relevant monitoring and reporting requirements.

The review will also:

- Encourage consolidation of certificates where appropriate.
- Identify other site-specific requirements as appropriate.

The Ministry recognizes that a balanced approach that considers both the benefits of enhanced requirements as well as the cost is important.

This Protocol contributes to an overall cycle of continuous improvement so that the requirements for existing CsofA will be made more consistent with the requirements placed on newly issued CofAs.

When will the Protocol be used to update a CofA ?

When the Ministry reviews an existing CofA for any reason, this Protocol will be used to determine if any changes to requirements should be incorporated. An outline of this process is presented in Figure 1.

The Ministry may review an existing CofA when:

- an owner makes an application to the Ministry for a change to the existing equipment, processes, production rates or for an expansion of plant capacity (excluding applications for minor changes and administrative amendments); or
- Ministry staff, through the course of compliance, inspection or enforcement activities, identifies a facility that is appropriate for a more in-depth assessment.

In addition, the Ministry may also target specific sectors and/or types of facilities with more significant potential environmental or health impacts based on overall Ministry and government environmental protection priorities.

There is also an existing mechanism under the *Environmental Bill of Rights* (EBR) through which the public may make an application to review an existing Certificate of Approval.

What is the Process?

Regardless of the mechanism used to trigger the CofA review, this Protocol will be used to determine the scope of the update. The more assessment criteria that apply to a CofA (details in next section), the more likely it is that a CofA update will be required.

When a project with an existing Certificate of Approval comes forward with an application to modify or expand its current operation, the Ministry will work and communicate directly with the facility owner throughout the process. Pre-application consultation is an important component of the application process. It can include discussing the extent to which the Ministry may require new or amended requirements in an updated CofA. By actively engaging in dialogue, the Ministry and the client can work together to define the environmental protection requirements of the project (e.g., establishing general acceptability of the proposed technology, identifying any special approval-related requirements and determining the need for public consultation or notification).

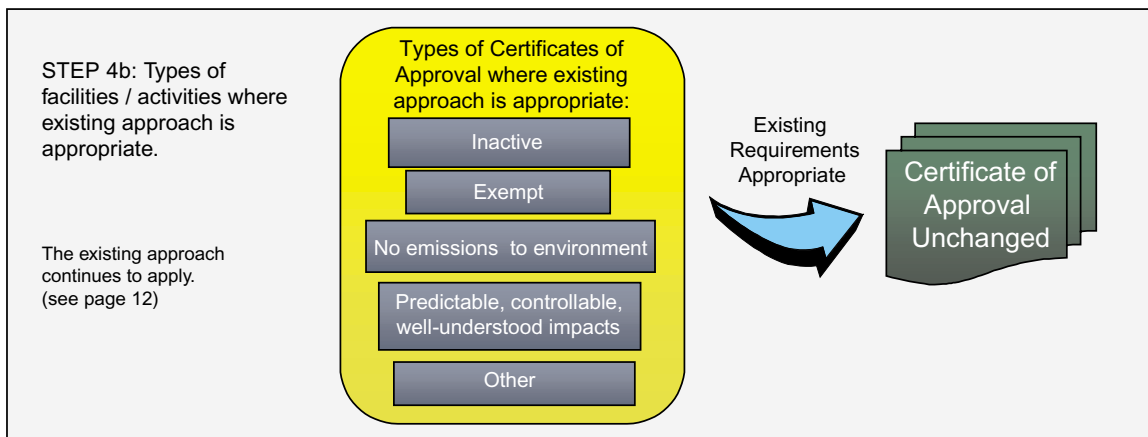
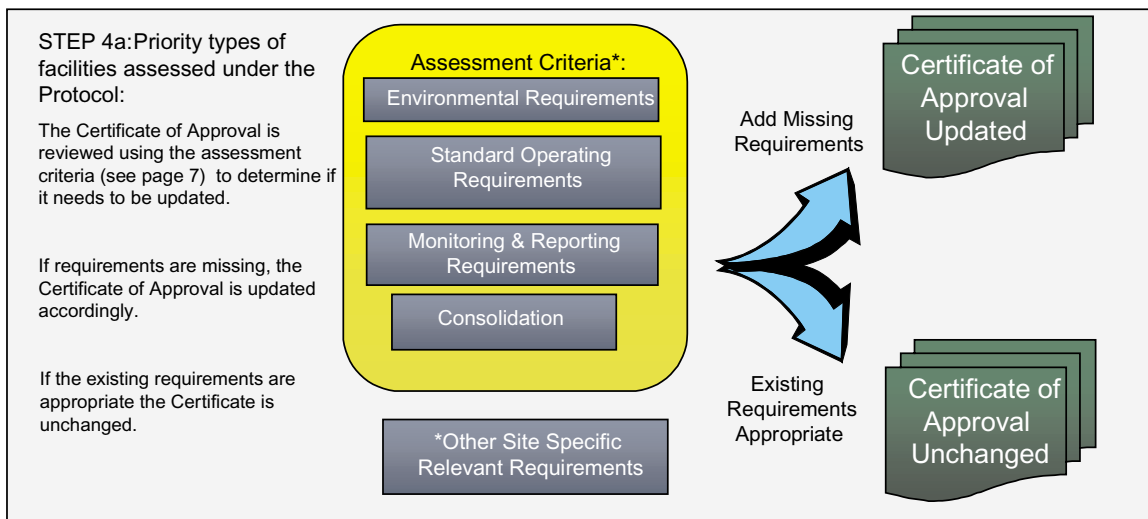
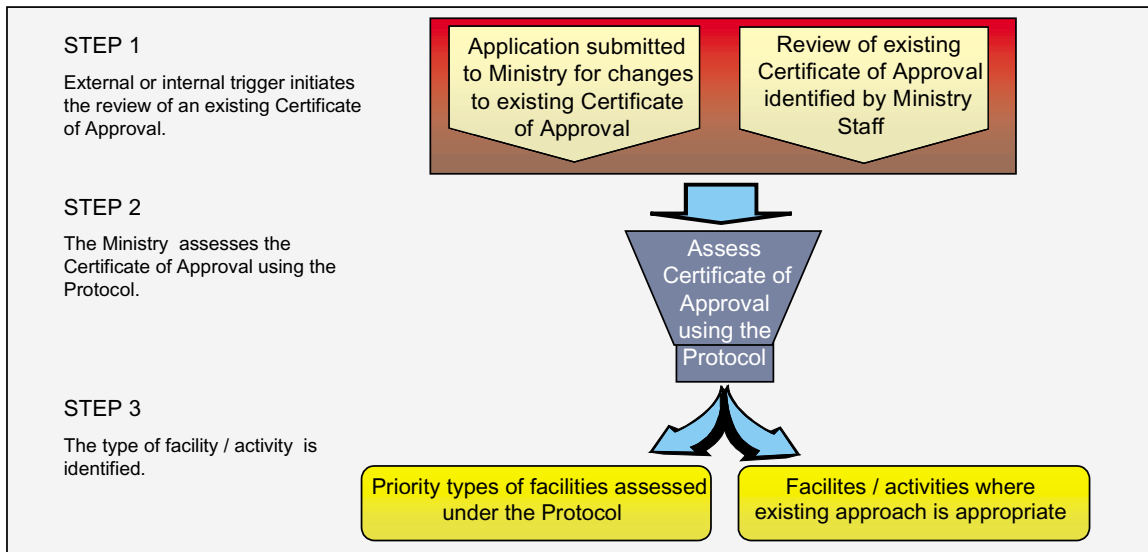
Once an application is submitted, the facility owner will receive an acknowledgement letter from the Ministry. This will reference the Ministry's intent to update the CofA in accordance with the Protocol. As well, when required by the *Environmental Bill of Rights*, the proposal for the CofA application will be posted on the Environmental Registry for public comment.

When an updated Certificate of Approval is drafted, a copy of the draft updated CofA is sent to the facility owner for further review, as appropriate.

If an update to a CofA is triggered by Ministry staff, through the course of their compliance, inspection or enforcement activities, the Ministry will either require that an application be submitted or initiate the update.

Upon completion, the final version of the CofA is issued. When required, a decision posting on the Environmental Registry will reflect the manner in which the Certificate of Approval has been updated at the end of the process.

Figure 1: Process for Updating CsofA



ASSESSMENT CRITERIA FOR WASTE

In this first phase of implementation, the focus of the *Protocol for Updating Waste Certificates of Approval* is on **environmentally significant waste management facilities that are associated with a higher risk of potential impacts on human health and the environment**. This includes the following groups of facilities:

- ❑ Hazardous waste disposal sites and incinerators.
- ❑ Non-hazardous waste disposal sites and incinerators.
- ❑ Hazardous waste processing and/or transfer sites.
- ❑ Non-hazardous waste processing and/or transfer sites.

The Ministry may also choose to assess and update other types of waste CsofA based on site-specific information or to support other environmental protection priorities at any time.

The detailed assessment criteria used by the Ministry to determine new or changed requirements that will be included in an updated waste CofA are discussed below.

Criteria 1: Environmental Requirements

At a minimum, if the relevant environmental protection requirements set out in existing Ministry policies, guidelines and objectives are not included, they may be added to the Certificate of Approval. These requirements include:

- Any relevant environmental protection requirements set out in the key Ministry documents for waste listed in Appendix A.

NOTE:

- For all new or expanded landfill sites requiring an Environmental Assessment, the landfill standards in Ontario Regulation 232/98 define these applicable requirements.

Criteria 2: Standard Operating Requirements

At a minimum, the Ministry will assess if the CofA has up-to-date standard operating requirements. If not, the types of requirements that may be added include:

For all types of waste sites:

- Maximum amounts and types of waste this site is authorized to receive on a daily basis and the approved service areas, as appropriate.
- Quality control procedures for the inspection of incoming materials to ensure only authorized wastes are accepted and for the refusal of unapproved wastes.
- Hours of operation for the days of the week and hours of the day the site will be operating.
- Documented procedure manuals which address staff training, site inspection, maintenance, compliant response, contingency and emergency response.
- Monitoring and control program for the prevention of off-site nuisance impacts due to noise, dust, odour, litter, vectors and vermin.
- Design and operations report detailing waste handling procedures for all aspects of operation and site control measures. Submission of this report to the Ministry may be required by a specified date for subsequent review and approval.

- Financial assurance requirements for privately-owned sites.
- Requirement for development of a closure plan and post-closure care provisions for eventual site decommissioning.
- Notification of any changes to the information concerning the identity or location of the owner or operator.
- Period of time records must be retained on-site.
- Registration on title under s. 197 EPA.

Specific requirements for landfill sites:

- Maximum site landfill capacity that may be based on the final approved contours of the site.
- Appropriate operational controls for the site including buffer areas, requirements for interim and final cover, final site contours, leachate, surface water management and landfill gas controls. Submission of these monitoring plans to the Ministry may be required by a specified date for subsequent review and approval.
 - For all new or expanded landfill sites requiring an Environmental Assessment, the landfill standards in Ontario Regulation 232/98 define these applicable requirements.
- Monitoring and analyses of surface and groundwater conditions to meet specified limits.

In addition to the requirements for all types of waste sites, the following will also apply for transfer and/or processing sites:

- Maximum on-site storage capacity and storage time limits and maximum residual waste that may be generated and sent off-site to a list of identified sites for final disposal.
- Appropriate procedures in place to comply with requirements in Regulation 347 for hazardous waste, as required.
- Specifications of the storage areas and equipment together with verification of conformance with the 1978 Chemical Storage guideline by a Professional Engineer, as appropriate.

In addition to the requirements for all types of waste sites, the following will also apply to incinerators:

- Maximum storage capacity and maximum feed rates.
- Analytical procedures for testing and final disposal of fly ash, incinerator ash or other residual waste at appropriate facilities.

Criteria 3: Monitoring and Reporting Requirements

At a minimum, if monitoring and reporting requirements appropriate for the type of waste facility are not in the existing CofA, requirements that may be added include:

For all types of waste sites:

- Notification procedures to the Ministry and others agencies, as appropriate, in the event of an emergency or other unexpected environmental impacts.
- Daily record keeping of types, quantities and sources of waste: received, transferred and/or processed, residual waste in storage and waste sent for off-site disposal.
- Annual performance reports prepared and submitted to the Ministry as required, including: quantities and types of waste received, managed at the site and sent for final disposal, together with an interpretation of all sampling and monitoring data required of the site operations.
- A compliance assessment summary of performance based on the findings of the annual report.

Specific requirements for landfill sites:

- Monitoring and sampling requirements for ambient air impacts, methane production, leachate quality, surface water impacts, groundwater impacts as appropriate.
 - For all new or expanded landfill sites requiring an Environmental Assessment the landfill standards in Ontario Regulation 232/98 define the applicable monitoring requirements.
- Notification of non-compliance events, such as exceeding a Provincial Water Quality Objective or exceeding criteria for groundwater (i.e., Reasonable Use guideline).
- An on-site inspector for all new or expanded waste disposal sites which require an Environmental Assessment, at the direction of the Environmental Review Tribunal or when recommended by Ministry staff.

- For sites requiring an Environmental Assessment, the requirement for a public liaison committee may be applied where appropriate or at the direction of the Environmental Review Tribunal.

Criteria 4: Consolidation

During the assessment, the Ministry will consider if multiple existing Certificates of Approval have been issued.

A decision to consolidate Certificates of Approval is based on whether sufficient information is readily available from:

- Ministry information systems;
- supporting documentation submitted by the facility owner; and
- information reasonably obtained from the facility owner during the technical review.

As a result, the updated Certificate of Approval may consolidate multiple existing Certificates of Approval (e.g., for specific processes or on a site-wide basis).

NOTE: If other relevant site-specific requirements (not listed above) are not included in a CofA, the Ministry may decide to update the CofA to address these issues on a case-by-case basis.

Waste CsofA Where Existing Approach/Requirements are Appropriate

It is unnecessary for proponents to use this *Protocol for Updating Waste Certificates of Approval* where the existing approach/requirements are appropriate. These include:

- Facilities that have ceased operating or are no longer in business. If the facility owner makes an application to the Ministry to revoke a CofA, the Ministry will direct site closure and decommissioning activities that are to be undertaken, as required.
- Collection and transportation of waste to another facility for storage or further transfer, treatment or final disposal.
 - Additional requirements are generally not required for these CsofA as minimum human health and environmental protection requirements are applied when the CofA is issued and any fundamental changes to the requirements have been set out and applied through regulations.
 - These types of CsofA include solid non-hazardous, hazardous waste and PCB waste management transportation systems.
 - An existing system is in place for notification and revision to the CofA for changes to the fleet of vehicles or types of waste transported by the waste management system.
- Certificates of Approval required for a temporary waste management activity. These types of CsofA are issued for a one-time waste management activity that occurs over a defined period of time and does not result in final disposal of waste at the location. Operational environmental protection requirements are included in these Waste CsofA to prevent potential impacts during the waste management activity and ensure that no residual waste is left at the site. They include:
 - Mobile processing systems handling non-hazardous or hazardous waste, temporary household hazardous waste collection events, temporary mobile PCB destruction activities and Emergency Certificates of Approval.

- Certificates of Approval for activities undergoing policy review. For example, the transportation and disposal by land application of hauled sewage (septage), processed organic wastes for municipal biosolids and other related waste materials may be affected by the proposed *Nutrient Management Act*.

Despite the foregoing, the Ministry retains the authority to review and require new or amended requirements in an existing waste CofA at any time.

APPENDIX A: KEY MINISTRY DOCUMENTS RELATED TO WASTE

- B-1 Water Management - Guidelines and Procedures of the Ministry of Environment and Energy (Guideline Summary)
- B-1-2 Water Management - Policies, Guidelines, Provincial Water Quality Objectives of the Ministry of the Environment (Includes B-1-1)
- B-7 Incorporation of the Reasonable Use Concept into MOEE Groundwater Management Activities
- B-7-1 Determination of Contaminant Limits and Attenuation Zones
- C-4 The Management of Biomedical Waste in Ontario
- C-5 Registration of Title of Certificates of Approval for Waste Disposal Sites
- C-7 Burning at Landfill Sites
- D-4 Land Use On or Near Landfills and Dumps
- D-4-1 Assessing Methane Hazards from Landfill Sites
- F-15 Financial Assurance
- Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites (May 1998)
- Noise Guidelines for Landfill Sites
- Guidance for Incinerator Design and Operation, Volume I, General Waste
- Incinerator Design and Operating Criteria, Volume II, - Biomedical Waste Incinerators
- Guidelines for Environmental Protection Measures at Chemical Storage Facilities
- Interim Guideline for the Production and Use of Aerobic Compost in Ontario
- Interim Guide to Estimate and Assess Landfill Air Impacts, Air Resources Branch
- Other applicable Ministry documents.

Many of these documents can be found at the Ministry of Environment's web site:
<http://www.ene.gov.on.ca/envision/gp/index.htm>