

**PROTOCOL FOR UPDATING
CERTIFICATES OF APPROVAL
FOR SEWAGE WORKS**

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 requirements 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 Management

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 Sewage Works Certificates of Approval* ("Protocol").

Information in the Protocol is organized in four sections:

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

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 Sewage Works 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 CsofA.

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., effluent requirements, establishing general acceptability of the proposed technology, identifying any special approval-related requirements and determining the need for public consultation or notification).

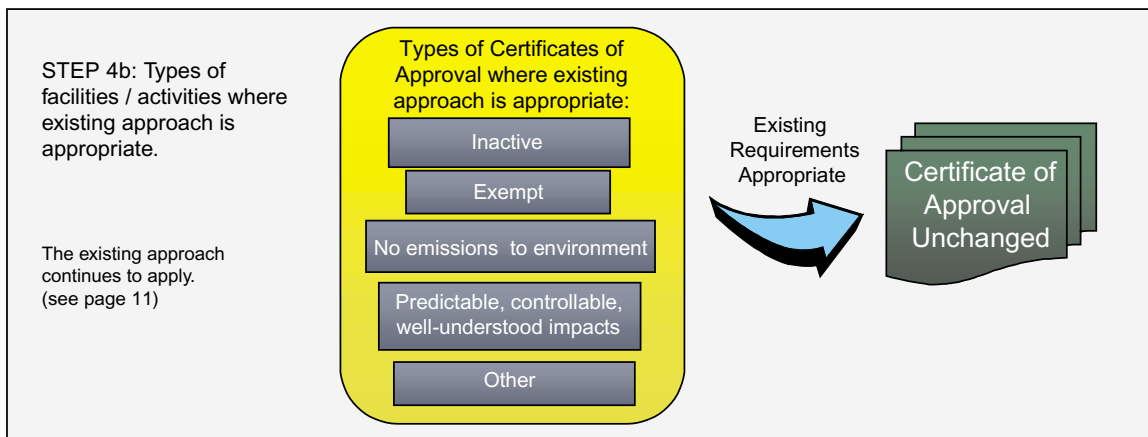
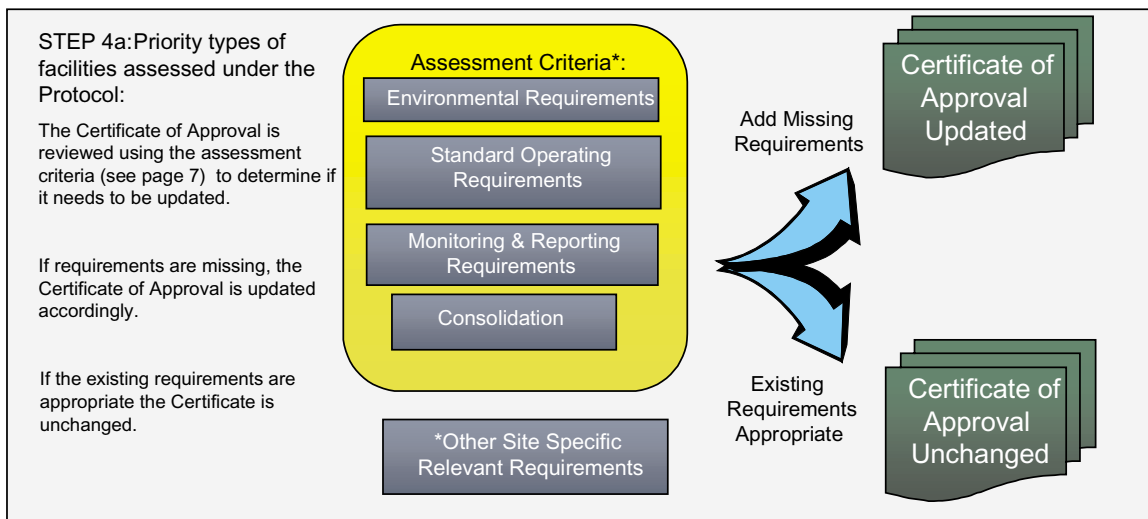
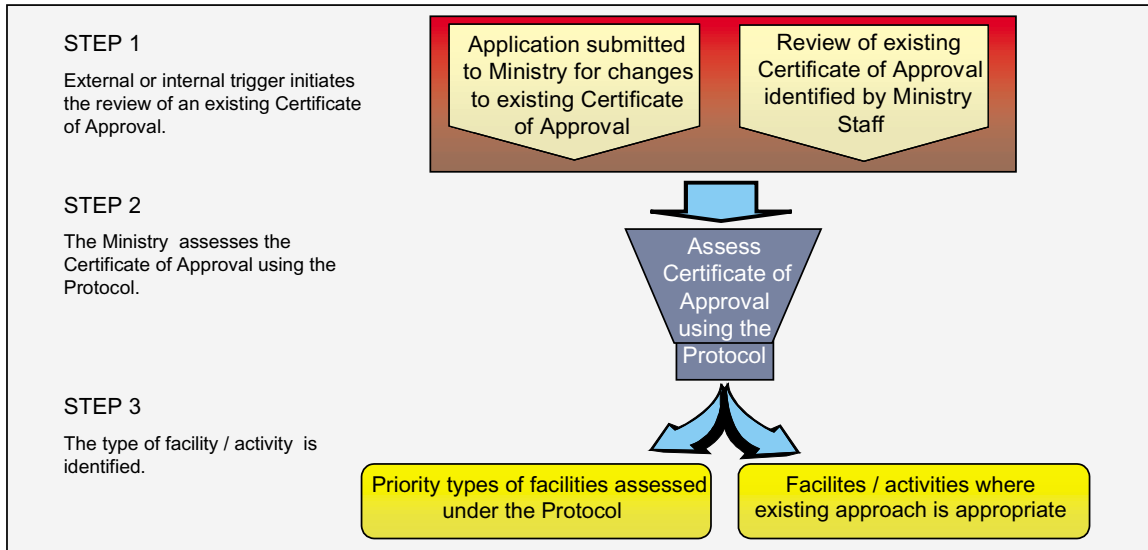
Once an application is submitted, the facility owner will receive an acknowledgement letter from the Ministry. This will reference the Ministry's intent to update the CofA in accordance with the Protocol. As well, when required by the *Environmental Bill of Rights*, the proposal for the CofA application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

In this first phase of implementation, the focus of the *Protocol for Updating Sewage Works Certificates of Approval* is on **environmentally significant facilities with direct effluent discharges to surface water or groundwater** such as:

- Municipal or private facilities for the treatment and disposal of sewage.
- Pumping stations and detention chambers that are designed and approved to overflow.
- Facilities for the treatment and disposal of industrial sewage, landfill leachate and ongoing site remediation activities.

The Ministry may also choose to assess and update other types of CsofA for sewage works 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 Sewage Works 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 Sewage Works listed in Appendix A.
- Capacity limits not to exceed the design flow rate of the sewage works.
- Effluent quality performance limits. For example:
 - If the client is requesting approval for a plant expansion to provide additional treatment capacity for an existing facility discharging to surface water or groundwater, an environmental impact analysis will be required and reviewed by the Ministry to determine new site-specific effluent quality criteria and toxicity limits in the updated CofA.
 - If a treatment plant is not undergoing expansion, the need for updated site-specific effluent quality criteria and toxicity limits will be informed by the need for additional protection of the receiving water body and determined on a case-by-case basis.

Criteria 2: Standard Operating Requirements

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

- Operation and maintenance manuals, contingency plans and documented complaint response procedures.
- As constructed (if available) and up-to-date record drawings of the facility.
- A signed responsibility agreement with the municipality for privately owned facilities for municipal sewage treatment.

Criteria 3: Monitoring and Reporting Requirements

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

- Monitoring and recording of flow measurements and effluent quality.
- Notification procedures to the Ministry of non-compliance events, such as effluent performance limits, effluent by-pass or operational failure.
- Annual performance reports including all sampling and monitoring data, together with a compliance assessment summary of performance.

Criteria 4: Consolidation

During the assessment, the Ministry will consider multiple existing Certificates of Approval issued to a single sewage works.

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.

Sewage Works Where the Existing Approach/Requirements are Appropriate

It is unnecessary for proponents to use this *Protocol for Updating Sewage Works 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.
- Some types of sewage facilities and equipment with minimal environmental impacts no longer require a Certificate of Approval due to exemptions under Ontario Regulation 525/98. These exemptions cover, for example:
 - Service connections from the existing sewers to the property line within the public right of way, components of the sewage collection system that do not affect the system's performance, including appurtenances (e.g., maintenance holes, catch basins and ditch inlet grates).
 - Relining or replacing existing sanitary and storm sewers to restore aging pipes and storm water management facilities which discharge into the sewage collection system that serve one lot or parcel of non-industrial land.
- Certificates of Approval required for parts of the sewage collection system, which do not discharge into the environment, including:
 - Storm and sanitary sewers, forcemains and pumping stations, detention chambers and storm water management systems discharging to the collection system.
 - Operation and maintenance of the sewage collection system is the responsibility of the owner and/or operating authority.

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

APPENDIX A: KEY MINISTRY DOCUMENTS RELATED TO SEWAGE WORKS

- B-1-2 Water Management - Policies, Guidelines, Provincial Water Quality Objectives of the Ministry of the Environment
- B-7 Incorporation of the Reasonable Use Concept into MOEE Groundwater Management Activities
- D5-2 Application of Municipal Responsibility for Communal Water and Sewage Services
- F-5 Levels of Treatment for Municipal and Private Sewage Treatment Works Discharging to Surface Waters
- F-5-1 Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works Discharging to Surface Waters
- F-5-2 Relaxation of the Normal Level of Treatment for Municipal and Private Sewage Treatment Works Discharging to Surface Waters
- F-5-3 Derivation of Sewage Treatment Works Effluent Requirements for the Incorporation of Effluent Requirements into Certificates of Approval for New or Expanded Sewage Treatment Works
- F-5-5 Determination of the Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer Systems
- F-8 Provision and Operation of Phosphorus Removal Facilities at Municipal, Institutional and Private Sewage Treatment Works
- F-10 Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)
- F-10-1 Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)
- F-15 Financial Assurance
- Stormwater Management Practices Planning and Design Manual [defines levels of protection for streams based on fish habitat and draws from MNR Guidelines such as "Fish Habitat Protection Guidelines for Developing Areas" as well as DFO (Federal Department of Fisheries and Oceans) Guidelines]
- Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land
- Interim Environmental Guidelines for Salmonid Aquaculture Facilities in Ontario
- Protocol for the Sampling and Analysis of Industrial/Municipal Waste Water
- Other applicable Ministry guideline 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>