## Temporary Bypass Authorizations



This is an unofficial document intended to summarize the proposed amendments to the *Wastewater Systems Effluent Regulations*. The *Regulations Amending the Wastewater Systems Effluent Regulations* are the official proposed amendments. Any inconsistencies with this document and the proposed regulations, the proposed regulations prevail. It does not replace or in any way supersede or modify the current Regulations or the *Fisheries Act*. It also does not offer any legal interpretation of the Regulations or Act.

Temporary bypass authorizations (TBAs) allow the owner or operator (regulatee) to bypass one or more treatment processes for a defined period of time. This could result in exceeding effluent limits temporarily. TBAs may be issued in the following circumstances:

- For necessary construction or maintenance work; or
- For anticipated events out of control of the regulatee (ex. planned power outage).

Currently, Environment and Climate Change Canada (ECCC) can only authorize a temporary bypass from the final discharge point. This is the pipe at the end of the wastewater treatment plant. Additional information on the current process to apply for a temporary bypass authorization is available online.

### **Proposed amendments**

The proposed amendments would allow ECCC to authorize TBAs at points other than the final discharge point, including the sewers. They would also create new requirements for TBAs.

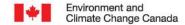
The proposed approach is based on risk. A more rigorous review is proposed for higher risk releases and a streamlined review for lower risk releases. Proposed bypasses would fall into one of three categories, depending on:

- the level of treatment
- volume of effluent to be released; and
- the duration of the bypass

The proposed approach would also consider sensitive receiving environments such as:

- shellfish harvesting areas; and
- protected habitats for aquatic species

This factsheet outlines the changes to the TBA provisions in Subsections 43 - 47 of the proposed amended Regulations.





### How to determine the bypass level of risk for an application

There are three proposed methods that would determine which of the following categories the bypass falls into:

- Streamlined Process (category 1, low risk)
- Standard Process (category 2, medium risk)
- Enhanced Process (category 3, high risk)

These proposed methods assess the risk of a bypass based on:

- level of wastewater treatment
- volume of effluent released
- whether releases are dependent on precipitation; and
- time needed to complete the work

This approach also considers sensitive receiving environments. Each method outlines the characteristics of the proposed bypass and the category it falls into.

### Method 1: Wastewater effluent receives physical treatment and/or biological treatment

Wastewater undergoes treatment for organic matter and suspended solids removal, such as aerated lagoons, clarifiers, etc.

	Characteristics of the Bypass	Bypass Category
1	a) Estimated volume less than or equal to 25,000 m³ and the approximate duration referred is less than or equal to 240 hours (10 days); and	Category 1
	b) Bypass is at the final discharge point or an overflow point(s) that enter a receiving environment that regularly receives wastewater.	
2	a) Estimated volume more than 500,000 m³ and approximate duration more than 2,160 hours (90 days); and	Cotogony 2
	b) Bypass meets one of the criteria associated with Sensitive Receiving Environment (see below).	Category 3
3	All other bypasses where the released effluent receives physical treatment and/or biological treatment.  Category 2	

#### Method 2: Wastewater effluent receives no treatment or preliminary treatment

Wastewater receives no treatment or only undergoes removal of large solids, such as screens and grinders.

	Bypass Category	
1	a) Estimated volume less than or equal to 2,500 m³ or the approximate duration less than or equal to 48 hours; and	Catagory 1
	b) Bypass is at the final discharge point or overflow point(s) that enter a receiving environment that regularly receives wastewater.	Category 1
2	a) Estimated volume more than 50,000 m³ or approximate duration more than 720 hours (30 days); or	
	b) Estimated volume more than 25,000 m³ or duration of bypass more than 360 hours (15 days); and bypass meets one of the criteria associated with Sensitive Receiving Environment (see below).	Category 3
3	All other bypasses where the released effluent receives no treatment or preliminary treatment.	Category 2

### Method 3: Wastewater effluent released during bypass is due to reduced treatment capacity caused by precipitation events

An example of this case is when the work performed will reduce the capacity of the system. In normal dry weather conditions, the system is expected to treat all the wastewater. However, in the case of a rain event, the system may need to be bypassed due to reduced capacity. The bypass that may result from the reduced capacity would fall under this method.

	Characteristics of the Bypass	Bypass Category	
	a) Estimated volume less than or equal to 5,000 m³ or a period of work less than or equal to 96 hours (4 days); and,	Category 1	
1	b) Bypass is at the final discharge point or overflow point(s) that enter a receiving environment that regularly receives wastewater.		
	a) Estimated volume more than 100,000 m³ or a period of work more than 1,440 hours (60 days); and	0-1	
2	b) Bypass meets one of the criteria associated with Sensitive Receiving Environment (see below).	Category 3	
3	All other bypasses due to reduced capacity of the system caused by precipitation events.	Category 2	

### **Criteria for Sensitive Receiving Environment**

Special receiving environment sensitivity criteria could trigger an enhanced review (category 3).

	Receiving Environment	Criteria
1	Shellfish Harvesting Area	A shellfish harvesting area is within 1,500 m of the bypass location.  Shellfish Harvesting Area Classification in Canada
2	Critical Habitat	An identified critical habitat for protected aquatic species is within 500 m of the bypass location.  Critical Habitat in Canada: Critical Habitat of Species at Risk Map  *You can combine this URL link with the link above to view the data together

### **Proposed Requirements for Temporary Bypass Authorization**

To be eligible to receive a TBA, you would have to meet specific requirements based on the level of risk (category). Proposed requirements vary depending on whether the bypass falls into the streamlined process (category 1), standard process (category 2) or enhanced process (category 3).

### Before submitting a temporary bypass authorization application, a regulatee would be required to:

- Notify the Shellfish Water Classification Program of the proposed bypass if they will release effluent into:
  - open marine waters
  - marine port waters
  - a shellfish harvesting area; or
  - within a radius of 20 km of such waters
- Notify the public, and any community or Indigenous governing body of the proposed bypass if:
  - they could be affected by the bypass, or
  - may use the receiving environment before, during or after the bypass

### **Requirements for the Temporary Bypass Authorization Application:**

Each bypass category has specific conditions that need to be met based on the level of risk (section 44):

# Category 1

### 21 days of notification Streamlined process / low risk

- Provide bypass information
- Develop a list of measures to be taken to reduce environmental impacts
- Provide follow-up report

### **Streamlined Process (Category 1)**

Application must be made at least 21 days before proposed bypass.

The following information must be provided in the application:

- Information about the planned bypass:
  - The start and end date
  - A description of the treatment, if any, applied to the effluent prior to discharge and
  - Whether precipitations will cause the bypass
  - The approximate duration (in hours);
  - The estimated volume (in m³) of the deposit and how the regulatee estimated the volume, if applicable;
- Measures that the regulatee will use (including timing proposed work) to minimize negative effects of the bypass on:
  - o Fish
  - Fish Habitat
  - The use of fish by persons
- A follow-up report to ECCC
- A description and results of the notifications and engagements (if any) with those that the bypass may impact including:
  - Members of the public
  - o Communities, or
  - Indigenous governing body

# Category 2

## **45 days of notification**Standard process / medium risk

- Include information required for Category 1
- Expand on list of measures to be taken to reduce environmental impacts and provide more details
- Declare that a plan exists to reduce large, untreated bypasses in the future, if required.

### **Standard Process (Category 2)**

Application must be made at least 45 days before proposed bypass.

All information required for Category 1 must be provided. In addition, the following information must be provided with the application:

- A detailed description of measures that will be put in place to avoid or lessen the negative effects of the bypass on:
  - o fish
  - fish habitat
  - the use of fish by persons
- For untreated releases, a declaration that a
  prevention plan is available to the public. This
  would describe the changes needed to the
  wastewater system, or other measures to reduce
  the need for bypass in the future.

## ategory 3

### 90 days of notification Enhanced process / high risk

- Include information required for Category 1 & 2
- Assess alternative methods to perform bypass
- Produce a study that outlines the extent of environmental impacts
- Develop a monitoring and sampling plan

### **Enhanced process (category 3)**

Application must be made 90 days before proposed bypass. This will allow ECCC to do a more thorough assessment to understand potential impacts.

Regulatees must include all information required in category 1 and 2, in addition to:

- The methodology and results of a study that assess
  - where effluent mixes with receiving waters; and
  - where there is a difference from the existing water conditions
    - An example of this is a plume delineation study;
- Detailed information on what other options the regulatee considered to complete the bypass, including an estimate of costs;
- A plan for monitoring the effluent and the receiving environment before, during and after the bypass. This is to assess how effective mitigation measures are.

ECCC may request additional information from an applicant to assist with assessing the potential negative effects of the bypass. ECCC must specify in writing the information required and the timeline for providing it.

### **Conditions once a Temporary Bypass Authorization has been issued:**

The owner or operator is required to send a follow-up report to ECCC within 90 days after the bypass has ended that contains:

- Actual duration and volume of the release;
- Description of the actual treatment applied to effluent, if any;
- Description of how the mitigation and monitoring measures have been implemented;
- Results of monitoring conducted during the bypass (Category 3);
- For untreated Category 2 and all Category 3 bypasses, a confirmation of the existence
  of a plan of measures to reduce the need for future TBAs. This must include a schedule
  to implement the plan and it must be available to the public.

#### Compliance obligations once a Temporary Bypass Authorization has been issued:

The regulatee must comply with Sections 7 to 22 and 48 of the Regulations. However, if the regulatee is not able to measure the average daily effluent volume at the wastewater system during the bypass, they can estimate the volume.

### **Process to Apply**

Temporary bypass application are submitted in the Effluent Regulatory Reporting Information System. A regulatee must submit the application **no later than 21, 45, or 90 days** before the start of the bypass, depending on the category the bypass falls into (<u>subsection 43</u>).

Regulatee must also notify the authorization officer if they become aware that the information provided in the authorization is incorrect and provide corrections without delay.

### **Refusal of Temporary Bypass Authorization**

### It is proposed that your TBA application could be refused if:

- 1) ECCC believes the bypass would result in adverse effects on fish, fish habitat or use by man of fish that cannot be mitigated (<u>subsection 45(3)</u>).
- 2) The TBA is not submitted in ERRIS under the required amount of time (21, 45 or 90 days before the start of the bypass) (<u>subsection 43(3)</u>).
- 3) ECCC believes that the information provided in the application is false or misleading (subsection 45(4)).
- 4) The application does not contain the required information (section 44).

#### FOR ADDITIONAL INFORMATION

Visit the Wastewater website at Canada.ca/wastewater.

If the information you need is unavailable on our website, please contact Environment and Climate Change Canada at <a href="mailto:eu-ww@ec.gc.ca">eu-ww@ec.gc.ca</a>.