Power Generating Plants

Fossil-Fuel and Nuclear Electric

2020 Biennial Industrial Water Survey:

CONFIDENTIAL once completed.

Selon nos dossiers votre langue de préférence est l'anglais, si vous préférez recevoir ce document en français, veuillez nous appeler au numéro sans frais suivant : 1-866-445-4323 ou ATS 1-855-382-7745



This information is collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S-19. COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THIS ACT.

Introduction

Survey purpose

Statistics Canada conducts this survey every two years to collect detailed information on water use by manufacturing, mining, and electrical power generating industries in Canada. The survey will ask about the following for your plant:

- the sources of water
- the treatment of water before it's used
- the initial uses of water
- · the recirculation and reuse of water
- the treatment of water before it's discharged
- the ultimate points of water discharge
- the monthly breakdown of water intake and discharge
- the costs of acquiring water, maintaining and operating the water systems, and discharging water.

This survey collects information that will help Canadians understand how industries use water across the country. The data are used to produce Statistics Canada's Physical flow account of Water Use in Canada, and Environment and Climate Change Canada's water indicator: Water withdrawal and consumption by sector. Government and private sector analysts use the data to formulate water policies.

Your information may also be used by Statistics Canada for other statistical and research purposes.

Security of emails and faxes

Statistics Canada advises you that there could be a risk of disclosure during facsimile or email. However upon receipt, Statistics Canada will provide the guaranteed level of protection afforded all information collected under the authority of the *Statistics Act*.

Note: Our online questionnaires are secure, there is no risk of data interception when responding to Statistics Canada online surveys.

Confidentiality

The *Statistics Act* protects the confidentiality of information collected by Statistics Canada.

Please return the questionnaire within 28 days.

Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at 1-888-883-7999.

If you are unable to complete within 28 days **OR** if you need help, call us at **1-866-445-4323** or **TTY 1-855-382-7745**.

Statistics Canada Operations and Integration Division 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6

Visit our website, www.statcan.gc.ca





Canadä

R	Reporting instructions					
•	 Please provide your best estimate when exact figures are not available. Please enter "0" in the corresponding box if the water volume is zero. 					
В	usiness or organization and contact information	tion				
1.	Verify or provide the business or organization's legal and ope Note: Legal name modifications should only be done to correct a spelling error of	erating name and correct where needed.				
	Legal name	Operating name (if applicable)				
2.	Verify or provide the contact information of the designated I and correct where needed	business or organization contact person for this questionnaire				
	Note: The designated contact person is the person who should receive this quest actually completes the questionnaire.	stionnaire. The designated contact person may not always be the one who				
	First name	Last name				
	Title	Preferred language of communication				
		English French				
	Mailing address (number and street)					
	City	Province, territory or state				
	Postal code or ZIP code Example: A9A 9A9 or 12345-1234					
	Country					
	Email address Example: user@example.gov.ca					
	Telephone number (including area code) Extension (if applical Example: 123-123-1234 (if applical	number ble)				
	Fax number (including area code) Example: 123-123-1234					

 3. Verify or provide the current operational status of the business or organization identified by the legal and operating name above. B00323 1 Operational → Go to question 4
 Not currently operational e.g., temporarily or permanently closed, change of ownership
 Why is this business or organization not currently operational? B00009 Seasonal operations → Go to question 3a Ceased operations → Go to question 3b Sold operations → Go to question 3c Sold operations → Go to question 3c Amalgamated with other businesses or organizations → Go to question 3d Temporarily inactive but will re-open → Go to question 3e No longer operating due to other reasons → Go to question 3f
3a. Seasonal operations
When did this business or organization close for the season?
When does this business or organization expect to resume operations?
3b. Ceased operations
When did this business or organization cease operations?
Date
Why did this business or organization cease operations?
¹ Bankruptcy
² Liquidation
³ Dissolution
⁴ Other Specify the other reasons why the operations ceased

3c. Sold operations	
When was this business or organization sold? YYYY MM DD B00212 Date	
What is the legal name of the buyer?	Go to question 4
3d. Amalgamated with other businesses or organizations	
When did this business or organization amalgamate? YYYY MM DD	•
What is the legal name of the resulting or continuing business or organization?	3
BUI40/	
What are the legal names of the other amalgamated businesses or organizations?	Go to question 4
3e. Temporarily inactive but will re-open	
When did this business or organization become temporarily inactive?	
YYYY MM DD B00214 Date	
When does this business or organization expect to resume operations?	
Date	
Why is this business or organization temporarily inactive?	
→	Go to question 4
3f. No longer operating due to other reasons	
When did this business or organization cease operations?	
Date	
Why did this business or organization cease operations?	

4.	Verify or provide the current main activity of the business or organization identified by the legal and operating name. Note: The described activity was assigned using the North American Industry Classification System (NAICS).
	¹ This is the current main activity → Go to next section
	² This is not the current main activity
	Provide a brief but precise description of this business or organization's main activity e.g. , breakfast cereal manufacturing, shoe store, software development
F	
5.	was this business or organization's main activity ever classified as:
	805111
	Yes
	² No → Go to next section
6.	When did the main activity change?
	YYYY MM DD
	Date

General information

1. Was this plant in operation at least one day during the 2020 calendar year?

In operation **includes** plants that are temporarily closed but there was some form of water use **e.g.**, water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam plants.

•	ths was this plant or	perational?			
Select all that	t apply.				
B00336_tp13	oths				
	1115				
OR					
B00336_tp1		B00336_tp5		B00336_tp9	A
Januar	У	May		S	eptember
B00336_tp2	24	B00336_tp6		B00336_tp1	
B00336_tp3	r y	B00336_tp7		B00336_tp1	
March		July		N	lovember
B00336_tp4		B00336_tp8		B00336_tp1	
April		August	· · · · · · · · · · · · · · · · · · ·		
/as the plant specif uring the 2020 cale	ïed below located i ndar year?	in	<u>(</u> , 0		
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein	f ied below located i ndar year? I in more than one loca calendar year. g confirmed to ensure i	in ation during 2020 the reported figu	please report the pures contribute to the	province or e correct pr	territory for the last locat ovincial or territorial estim
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein	fied below located i ndar year? I in more than one loca calendar year. g confirmed to ensure	in ation during 2020 the reported figu) please report the p ures contribute to the	province or e correct pr	territory for the last locat ovincial or territorial estin
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein ⁰¹²² Yes ² No	ied below located i ndar year? I in more than one loca calendar year. g confirmed to ensure	in ation during 2020 the reported figu) please report the p ures contribute to the	province or e correct pr	territory for the last locat ovincial or territorial estim
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein ⁰¹²² 1 Yes 2 No In which pre	ied below located i ndar year? d in more than one loca calendar year. g confirmed to ensure confirmed to ensure	in ation during 2020 the reported figu	please report the pures contribute to the	province or	territory for the last locat ovincial or territorial estim
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein ⁰¹²² ¹ Yes ² No In which pre Select all that	ied below located i ndar year? I in more than one loca calendar year. g confirmed to ensure confirmed to ensure ovince or territory w	in ation during 2020 the reported figu	please report the pures contribute to the	province or e correct pr	territory for the last locat ovincial or territorial estim
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein ⁰¹²² ¹ Yes ² No L In which pro Select all that B50039 01	fied below located i ndar year? d in more than one loca calendar year. g confirmed to ensure g confirmed to ensure to ovince or territory we capply.	in ation during 2020 the reported figu vas the plant la	please report the p ures contribute to the ast located?	province or e correct pr	territory for the last locat ovincial or territorial estim
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein 0122 1 Yes 2 No 2 In which pro Select all that B50039 01 Newfor	fied below located i ndar year? d in more than one loca calendar year. g confirmed to ensure g confirmed to ensure ovince or territory w t apply.	in ation during 2020 the reported figurers of the reported figurers of the plant laters of the plant later	D please report the plane contribute to the plane cont	province or e correct pr	territory for the last locat ovincial or territorial estim
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein ⁰¹²² Yes No In which pro Select all that ^{B50039} ⁰¹ Newfo	fied below located i ndar year? d in more than one loca calendar year. g confirmed to ensure g confirmed to ensure by ince or territory we tapply.	in ation during 2020 the reported figurers of the reported figurers of the plant later of	D please report the plane rep	province or e correct pr	territory for the last locat ovincial or territorial estim Yukon Northwest Territories
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein ⁰¹²² ¹ Yes ² No In which pre Select all that ⁸⁵⁰⁰³⁹ ⁰¹ Newfor ⁰² Prince	fied below located i ndar year? d in more than one loca calendar year. g confirmed to ensure ovince or territory we t apply. pundland and Labrace Edward Island Scotia	in ation during 2020 the reported figures of the reported figures of the plant later of t	D please report the p ures contribute to the ast located? Ontario Manitoba Saskatchewan	11 12 13	territory for the last locat ovincial or territorial estim Yukon Northwest Territories Nunavut
Vas the plant specif uring the 2020 cale the plant was situated f the plant in the 2020 his information is bein ⁰¹²² ¹ Yes ² No In which pro Select all that ⁸⁵⁰⁰³⁹ ⁰¹ Newfor ⁰² Prince ⁰³ Nova ⁰⁴ New F	fied below located i ndar year? d in more than one loca calendar year. g confirmed to ensure ovince or territory we t apply. Dundland and Labrace Edward Island Scotia Brunswick	in ation during 2020 the reported figures vas the plant la dor ⁰⁶ ⁰⁷ ⁰⁸ ⁰⁸	D please report the place rep	11 12 13	territory for the last locat ovincial or territorial estim Yukon Northwest Territories Nunavut

3.	In 2020, what was the average number of people working on the premises of this plant in full-time equivalents (FTE)?
	Include permanent, contract and casual employees that work on the premises.
	Employment may be full-time or part-time, FTE converts part-time jobs to full-time jobs based on the hours worked. For example, if out of four employees employed at your plant one works full-time and the remaining three work the equivalent of half of a full time job, then FTE employment = $1 + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2.5$.
	When exact figures are not available, please provide your best estimate.
	Number of people
4.	How many days did this plant operate in 2020?
	In operation includes plants that are temporarily closed but there was some form of water use e.g. , water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or pollution control.
	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	B00338 Davs
5.	How many weeks did this plant operate in 2020?
	In operation includes plants that are temporarily closed but there was some form of water use e.g. , water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or pollution control.
	When exact figures are not available, please provide your best estimate.
	B00339
	Weeks
6.	On average, how many days per week did this plant operate in 2020?
	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	Days per week
7	On average, how many hours did this plant operate in a day in 2020?
1.	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	800342
	Hours .

Unit of measure

8.

If you select a multiple of a unit of measure as your reporting unit, please take care to enter the correct decimal values or number of zeros when reporting water volumes in this questionnaire. **For example**, if thousands of imperial gallons is specified as the unit of measure, note that a reported quantity of 3.5 = 3,500 (3.5 thousand) imperial gallons, whereas a reported quantity of 3,500 = 3,500,000 (3.5 million) imperial gallons.

Please select only one unit of measure.

What unit of measure will be used to report water volumes throughout this questionnaire? B00522 Cubic metres (M3) Tens of cubic metres (10 M3) If you select "tens of cubic metres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 35 cubic metres. Thousands of cubic metres (1,000 M3) If you select "thousands of cubic metres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 cubic metres. Litres (L) Hectolitres (hL) If you select "hectolitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 350 litres. Thousands of litres (1,000 L) or kilolitres (kL) If you select "thousands of litres" or "kilolitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 litres. Millions of litres (1,000,000 L) or megalitres (ML) If you select "millions of litres" or "megalitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500,000 litres. Imperial gallons (imp. gal.) Thousands of US gallons (1,000 US gal.) If you select "thousands of US gallons" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 US gallons. US gallons (US gal.) Thousands of US gallons (1,000 US gal.) If you select "thousands of US gallons" as your unit of measure, 3.5 reported in the guestionnaire will be counted as 3,500 US gallons. Millions of US gallons (1,000,000 US gal.) If you select "millions of US gallons" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500,000 US gallons. Cubic feet (cu. ft.)

Wa	iter inta	ke by source and type	
9.	Please re	port the volume of intake water for the following types and sources.	
	If the wate	r volume is zero, please enter "0" in the corresponding box.	
	When exa	ct figures are not available, please provide your best estimate.	
			2020
			volume of intake water
	For the	nwater ne purpose of this survey, freshwater contains an average of 900 parts per million (ppm) or less of tota	al dissolved solids.
	a.	Public utility	E79007_y1_sc1
		i.e., a publicly owned/operated (municipal, city or provincial) system of drawing, treating and distributing water	
	b	Self-supplied surface water system	E79007_y1_sc2
	υ.	i.e., lake, river	
			E79007_y1_sc3
	с.	Self-supplied groundwater system	
		I.e., weil, springs	
	d.	Other freshwater sources	E79007_y1_sc90
		e.g., delivery of water from a private supplier, an adjacent industry, rain water, run-off water Exclude bottled water intended for personal consumption.	
			E79007_y1_sc100
	Sub	total volume of freshwater intake in 2020	
	For the	ne or brackish water ne purpose of this survey, saline or brackish water contains an average of more than 900 parts per millior	n (ppm) of total dissolved solids.
			F79007 v2 sc3
	a.	Self-supplied groundwater system	L13001_yz_003
		i.e., well, spring	
	Ŀ		E79007_y2_sc4
	D.	Self-supplied tide water (salt water) body i.e., estuary, bay, ocean	
			E79007_y2_sc90
	c.	Other saline or brackish water sources	
		e.g., delivery of water from a private supplier, an adjacent industry	
			E79007_y2_sc100
	Sub	total volume of saline or brackish water intake in 2020	
			E79007 y100 sc100
	Tetely	aluma of intelestuates in 2020	
	Total V	Sume of Intake water in 2020	

Tre	eatn	nent of intake water				
10.	Plea meti	Please report the volume of intake water treated within this plant prior to initial use for the following methods of treatment.				
	Excl	Exclude the treatment of used water, waste water or effluent. If a given volume of water undergoes more than one treatment,				
	If the	e water volume is zero, please enter "0" in the corresponding box.				
	Whe	n exact figures are not available, please provide your best estimate.				
			2020 volume of intake water treated			
	a.	Screening	E79008_m1			
		The removal of larger pieces of solid matter from water using a screen barrier. Includes the bulk screening of intake water at the source.				
	h	Filter	E79008_m2			
	D.	The removal of smaller pieces of solid matter from water using a filter barrier.				
		14	E79008_m3			
	c.	Chlorination – disinfection				
			E79008_m4			
	d.	Corrosion and slime control Includes the control of scale, corrosion, biological growth and sludge.				
			E79008_m5			
	e.	Alkalinity control The chemical treatment of water to attain required pH level.				
			E79008_m6			
	t.	Hardness or water softening The removal of calcium and magnesium from water to reduce hardness.				
			E79008_m7			
	g.	Coagulation or flocculation The absorption of particles in order to easily remove them from water.				
	h.	Other category of treatment - Item 1				
		Other treatments include electrolysis, de-salination, etc.				
			E/9008_m91			
	i.	Other category of treatment — Item 2				
			E79008_m92			
	j.	Other category of treatment — Item 3				
	·	Other treatments include electrolysis, de-salination, etc.	E70000 m02			
		E/300/				

Water intake by initial use 11. Please report the volumes of intake water by initial use. Exclude recirculated or reused water, i.e., water that leaves a particular sub-system and re-enters it or is used in another sub-system. If the water volume is zero, please enter "0" in the corresponding box. When exact figures are not available, please provide your best estimate. 2020 volume of intake water by use a. Cooling, condensing and steam i.e., water which does not come in direct contact with the products, materials or by-products of the processing operation Include: • pass-through water used in the operation of cooling or process equipment E79009 dt2 (including air conditioning) · water introduced into boilers for the production of steam for either process operations or electric power. b. Pollution control E79009 dt3 i.e., any process that inhibits or reduces the production of pollutants during the course of power generation e.g., wet flu gas de-sulphurization E79009_dt4 c. Sanitary service or domestic use i.e., water used for toilets, janitorial services, lawn watering, washing vehicles E79009_dt91 d. Other purpose or use - Item 1 Exclude water pumped by the plant and intended for initial use outside the plant. E79009_dt92 e. Other purpose or use - Item 2 Exclude water pumped by the plant and intended for initial use outside the plant. E79009_dt93 f. Other purpose or use - Item 3 Exclude water pumped by the plant and intended for initial use outside the plant. E79009 dt100 Total volume of intake water by initial use in 2020 The sum of the intake water should equal the amount reported at question 9.

Wa	Water recirculation or reuse by purpose				
 Please report the volumes of water recirculated or reused by purpose. Every time a volume of water is recirculated or reused it should be counted. 					
	Recirculated or reused water refers to water used more than once in your plant. It is water that leaves a sub-system and is then recirculated or reused in the same sub-system, or used in a different sub-system. It does not refer to water that circulates many times within the same sub-system is a it arcludes closed loop systems.				
	If the wate	er volume is zero, please enter "0" in the corresponding box.			
	When exa	ct figures are not available, please provide your best estimate.			
			2020 volume of water recirculated or reused		
	а	Cooling condensing and steem			
	a.	i.e., water which does not come in direct contact with the products, materials or by-products of the processing operation			
		Include: pass-through water used in the operation of cooling or process equipment	F70044 - H0		
		(including air conditioning)	E/9011_0T2		
		 water introduced into boilers for the production of steam for either process operations or electric power. 			
	b.	Pollution control			
		i.e., any process that inhibits or reduces the production of pollutants during the course	E/9011_dt3		
		e.g., wet flu gas de-sulphurization			
			E79011_dt90		
	c.	Other purpose or use			
			E79011_dt100		
	Total v	olume of water recirculated or reused in 2020			
		Forini			

Treatment of discharge water

13. Please report the volumes of water according to their **final point of discharge** and **most advanced treatment** process used at this plant.

For water that is subjected to more than one type (primary, secondary or tertiary) of treatment in preparation for discharge, please report those volumes only at the most advanced treatment process that is applied; in other words, please do not double-report treated water volumes.

Treatment type:

- no treatment: the water that is discharged without treatment after use
- primary / mechanical treatment: the physical removal of large suspended, floating and precipitated solids from untreated wastewater using grates, screens and/or settling tanks
- secondary / biological treatment: the removal or reduction of effluent contaminants from primary wastewater treatment through the promotion of bacterial growth and other microbes that break down organic waste
- tertiary / advanced treatment: advanced cleaning of wastewater that goes beyond the secondary or biological stage, removing nutrients such as phosphorus, nitrogen, and most BOD and suspended solids through biological or chemical processes.

If the water volume is zero, please enter "0" in the corresponding box. When exact figures are not available, please provide your best estimate.

		No treatment	Primary or mechanical	Secondary or biological	Tertiary or advanced
		E79012_m8_sc1	E79012_m9_sc1	E79012_m10_sc1	E79012_m11_sc1
a.	Public sewage system				
b.	Surface freshwater bodies	E79012_m8_sc5	E79012_m9_sc5	E79012_m10_sc5	E79012_m11_sc5
c.	Tide water (ocean)	E79012_m8_sc4	E79012/m9_8c4	E79012_m10_sc4	E79012_m11_sc4
d.	Groundwater	E79012_m8_sc3	E79012_m9_sc3	E79012_m10_sc3	E79012_m11_sc3
e.	Other point of discharge	E79012_m8_sc90	E79012_m9_sc90	E79012_m10_sc90	E79012_m11_sc90
Sub disc	total volume of harge water	E79012_m8_sc100	E79012_m9_sc100	E79012_m10_sc100	E79012_m11_sc100
otal v	olume of discharge water	r in 2020			E79012_m100_sc100

To

Monthly	water intake and discharge		
14. In 202), what was the monthly water intake and discharge for this plant?		
If the v	ater volume is zero, please enter "0" in the corresponding box.		
When	xact figures are not available, please provide your best estimate.		
		Volume of water intake	Volume of water discharge
		E79007_tp1	E79012_tp1
	. January		
		E79007_tp2	E79012_tp2
	. February		
		E79007_tp3	E79012_tp3
	March		
	April	E/900/_104	E/9U12_tp4
		E79007 tp5	E79012_tp5
	e. May	O'	
		E79007_tp6	E79012_tp6
	. June		
		E79007_tp7	E79012_tp7
	j. July		
	August	F\ann_tb8	E/9U12_tp8
		E79007_tp9	E79012_tp9
	. September		
		E79007_tp10	E79012_tp10
	. October		
		E79007_tp11	E79012_tp11
	. November	57007 1/40	52000 440
	December	E19007_T012	EVA015 ¢15
		E79007 to100	E79012 to100
T			
lota	volume in 2020		_
15. If the	otal discharge volume is greater than the total intake volume, please ind	cate the reasons .	
	800343		
Reaso	1		

Wa	iter	acquisition costs		
16.	Plea	ase report this plant's 2020 water acquisition costs.		
	Whe	en exact figures are not available, please provide your best estimate.		
			2020	
			COST IN CAN	•
	a.	Payment to public utility Benort cost for water volume reported at question 11	F62551_sr1	
		If possible include only the portion paid for water and exclude sewer charges.	\$.00
	h	Annual intoka liconace, parmite and revaltice	F00FF1 - 0	
	D.	Please report the annual cost of intake licences, permits and royalties.	¢	00
		If not purchased annually, please provide the pro-rated cost.	φ	.00
	c.	Payment for purchase of water from another operator and/or	F62551_sr3	
		industrial supplier	\$.00
			\sim	
17.	Doe	es the payment to a public utility reported at question 16 include a sewer surcharge	e?	
	lf no	o sewer surcharge was reported please select "Not applicable".		
	Sew the	ver surcharge refers to the payment to a public utility for the ongoing maintenance and operation treatment and discharge of water to a public sewage system.	on of sewer infrastructure and	
	B00523			
	2	Yes		
	2	No		
	3	Not applicable		
20				
	tor	operating and maintenance parts		_
VVč	iter	operating and maintenance costs		
18.	Plea	ase report the total 2020 operating and maintenance cost for this plant's water syste	ems.	
	Incl	ude the material, labour and energy costs incurred to operate and maintain your water system	IS.	
	Con	isider the systems at your plant which:		
	•	treat intake water		
	•	treat discharge water		
	Whe	en exact figures are not available, please provide your best estimate.		
			F61083 v100	
			¢	00
	Т	otal cost in CAN\$	φ	.00

19. Of the reported costs at question 18, what were the **2020 operating and maintenance costs** for the following water systems? When exact figures are not available, please provide your best estimate.

			2	2020 Cost in CAN\$	
	a.	Intake water acquisition	F61083_v1		
		Include the material, labour and energy costs incurred to operate and maintain the systems that bring water into your plant.	\$.00
	b.	Intake water treatment	F61083_v2		
		Include the material, labour and energy costs incurred to operate and maintain the systems to treat water brought into your plant.	\$.00
	c.	Water recirculation and reuse	F61083_v3		
		Include the material, labour and energy costs incurred to operate and maintain the systems to recirculate and reuse water in your plant.	\$.00
	d.	Discharge water treatment	F61083_v4		
		Include the material, labour and energy costs incurred to operate and maintain the systems to treat water discharged by your plant.	\$.00
		0	F61083_v100P	F1	_
	То	tal operating and maintenance costs in 2020	\$.00
Othe	er (details			
I c F	nclu liscl Excl	 ude all relevant outlays for machinery and equipment purchases, and their installation, as well harge and treatment i.e., called capital outlay or capital expense. ude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. In exact figures are not available, please provide your best estimate. 	as for consti	ruction related to water	intake,
	Ca	apital expenditures in CAN\$	\$.00

21. Which of the following goods, technologies and services were purchased related to water management and efficiency (including water recirculation and reuse) by this establishment during the **2020** fiscal year? Select all that apply.

Go

Goods	s and technologies
B05	Software for measurement and control of water useau
B05	Platforms or systems for measurement and control of water use
B05	Sensors for measurement and control of water use
B05	Greywater reuse systems
B05	Equipment to reduce water consumption
B05	Water desalination equipment
B05	Rainwater collection equipment
B05	All other water management and efficiency goods and technologies
	Specify other water management and efficiency goods and technologies
0	R
B05	None of the above
Servic	es
B05	Planning and design services
B05	Efficiency consulting services
B05	251_y24_p337 Laboratory service
B05	Pipe inspection services
B05	Piloting, validation and verification services
BOS	Training and plant operation services
B05	Augmentation ou diminution de la demande du marché
BOS	
	All other water management and efficiency services
	Specify other services related to water management and efficiency
0	R

None of the above

22. In 2020 , what was the gross electrical generation capacity of this plant?
i.e., the maximum power capability of the generating system or system capacity.
B11003
MW
Changes or events
23. Please provide a brief, precise description of any changes or events that affected the reported water or cost values for this plant, compared with the last reporting period.
e.g., expansion, temporary shutdown, closures, changes to water monitoring or the production process
Describe these changes or events
× V
FOLUS

C	untact nerson
24.	Statistics Canada may need to contact the person who completed this questionnaire for further information.
	If the contact person is the same as on cover page, please check \bigcirc \rightarrow Go to "Feedback"
	Otherwise, who is the best person to contact about this questionnaire?
	First name
	Last name
	Title
	Email address (Example: user@example.gov.ca)
	O^*
	Telephone number (including area code) Extension number Fax number (including area code) Example: 123-123-1234 (if applicable) Example: 123-123-1234
Fe	edback
25.	How long did it take to complete this questionnaire? Include the time spent gathering the necessary information
25. 26.	How long did it take to complete this questionnaire? Include the time spent gathering the necessary information
25. 26.	How long did it take to complete this questionnaire? Include the time spent gathering the necessary information. We invite your comments about this questionnaire.
25. 26.	Hours Minutes How long did it take to complete this questionnaire? Include the time spent gathering the necessary information. We invite your comments about this questionnaire.
25. 26.	Hours Minutes Hours Minutes Include the time spent gathering the necessary information
25. 26.	Hours Minutes Hours Minutes Include the time spent gathering the necessary information
25. 26.	Hours Minutes Hours Provide this questionnaire? Include the time spent gathering the necessary information We invite your comments about this questionnaire. B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the necessary information B0002 Image: A state of the time spent gathering the time spent
25.	Hours Minutes Include the time spent gathering the necessary information. We invite your comments about this questionnaire.
25.	Hours Minutes Include the time spent gathering the necessary information
25.	Hours Minutes Include the time spent gathering the necessary information. Image: Complete this questionnaire. We invite your comments about this questionnaire. Image: Complete this questionnaire.
25.	Hours Minutes Hours Minutes Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. We invite your comments about this questionnaire. Include the time spent gathering the necessary information. B0002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. We invite your comments about this questionnaire. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. We invite your comments about this questionnaire. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. Include the time spent gathering the ne
25.	Hours Minutes Include the time spent gathering the necessary information
25.	Hours Minutes How long did it take to complete this questionnaire? Image: Complete this questionnaire. Image: Complete this questionnaire. We invite your comments about this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Doore Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Doore Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Doore Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Doore Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Doore Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Complete this questionnaire. Image: Comple
25.	Hours Minutes Hours Minutes Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. We invite your comments about this questionnaire. Include the time spent gathering the necessary information. B0002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. B0002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. B0002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. B0002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. B0002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. B0002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. B002 Include the time spent gathering the necessary information. Include the time spent gathering the necessary information. B002 Include the time spent gathering the
25.	Hours Minutes Include the time spent gathering the necessary information We invite your comments about this questionnaire.

Confidentiality

Your answers are confidential.

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the *Statistics Act*. Statistics Canada will use the information from this survey for statistical purposes.

Data-sharing agreements

To reduce respondent burden, Statistics Canada has entered into data sharing agreements with provincial and territorial statistical agencies and other government organizations, which have agreed to keep the data confidential and use them only for statistical purposes. Statistics Canada will only share data from this survey with those organizations that have demonstrated a requirement to use the data.

Section 11 of the *Statistics Act* provides for the sharing of information with provincial and territorial statistical agencies that meet certain conditions. These agencies must have the legislative authority to collect the same information, on a mandatory basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not requested and businesses may not object to the sharing of the data.

For this survey, there are **Section 11** agreements with the provincial and territorial statistical agencies of Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, and the Yukon. The shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

Section 12 of the *Statistics Act* provides for the sharing of information with federal, provincial or territorial government organizations.

Under **Section 12**, you may refuse to share your information with any of these organizations by writing a letter of objection to the Chief Statistician, specifying the organizations with which you do not want Statistics Canada to share your data and mailing it to the following address:

Chief Statistician of Canada Statistics Canada Attention of Director, Enterprise Statistics Division 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6.

You may also contact us by email at statcan.esd-helpdeskdse-bureaudedepannage.statcan@canada.ca or by fax at 613-951-6583.

For this survey, there are **Section 12** agreements with the statistical agencies of Prince Edward Island, the Northwest Territories and Nunavut as well as with Environment Canada.

For agreements with provincial and territorial government organizations, the shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

Record linkages

To enhance the data from this survey and to minimize the reporting burden, Statistics Canada may combine it with information from other surveys or from administrative sources.

Thank you for completing this questionnaire. Please retain a copy for your records. Visit our website, www.statcan.qc.ca

CONFIDENTIAL once completed.

2020 Biennial Industrial Water Survey: Manufacturing Industries Selon nos dossiers votre langue de préférence est l'anglais, si vous préférez recevoir ce document en français, veuillez nous appeler au numéro sans frais suivant : 1-866-445-4323 ou ATS 1-855-382-7745



This information is collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S-19. COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THIS ACT.

Introduction

Survey purpose

Statistics Canada conducts this survey every two years to collect detailed information on water use by manufacturing, mining, and electrical power generating industries in Canada.

The survey will ask about the following for your facility:

- the sources of water
- the treatment of water before it's used
- the initial uses of water
- the recirculation and reuse of water
- the treatment of water before it's discharged
- the ultimate points of water discharge
- the monthly breakdown of water intake and discharge
- the costs of acquiring water, maintaining and operating the water systems, and discharging water.

This survey collects information that will help Canadians understand how industries use water across the country. The data are used to produce Statistics Canada's Physical flow account of Water Use in Canada, and Environment and Climate Change Canada's water indicator: Water withdrawal and consumption by sector. Government and private sector analysts use the data to formulate water policies.

Your information may also be used by Statistics Canada for other statistical and research purposes.

Security of emails and faxes

Statistics Canada advises you that there could be a risk of disclosure during facsimile or email. However upon receipt, Statistics Canada will provide the guaranteed level of protection afforded all information collected under the authority of the *Statistics Act*.

Note: Our online questionnaires are secure, there is no risk of data interception when responding to Statistics Canada online surveys.

Confidentiality

The *Statistics Act* protects the confidentiality of information collected by Statistics Canada.

Please return the questionnaire within 28 days.

Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at 1-888-883-7999.

If you are unable to complete within 28 days **or** if you need help, call us at **1-866-445-4323** or **TTY 1-855-382-7745**.

Statistics Canada Operations and Integration Division 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6

Visit our website, www.statcan.gc.ca

5120.1: 2021-03-11



Canadä

Reporting instructions						
•	 Please provide your best estimate when exact figures are not available. Please enter "0" in the corresponding box if the water volume is zero. 					
В	usiness or organization and contact informat	tion				
1.	Verify or provide the business or organization's legal and ope Note: Legal name modifications should only be done to correct a spelling error of	erating name and correct where needed.				
	Legal name	Operating name (if applicable)				
2.	Verify or provide the contact information of the designated band correct where needed.	ousiness or organization contact person for this questionnaire				
	Note: The designated contact person is the person who should receive this quest actually completes the questionnaire.	stionnaire. The designated contact person may not always be the one who				
	First name	Last name				
	Title	Preferred language of communication				
		English French				
	Mailing address (number and street)					
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
	City	Province, territory or state				
	Postal code or ZIP code Example: A9A 9A9 or 12345-1234					
	Country					
	Email address Example: user@example.gov.ca					
	Telephone number (including area code)       Extension (if applicate)         Example: 123-123-1234       (if applicate)	number ole)				
	Fax number (including area code) Example: 123-123-1234					

<ul> <li>3. Verify or provide the current operational status of the business or organization identified by the legal and operating name above.</li> <li>B00323</li> <li>1</li> <li>Operational          <ul> <li>Control operation 4</li> </ul> </li> </ul>				
<ul> <li>Not currently operational</li> <li>e.g., temporarily or permanently closed, change of ownership</li> </ul>				
<ul> <li>Why is this business or organization not currently operational?</li> <li>B000000</li> <li>Seasonal operations → Go to question 3a</li> <li>Ceased operations → Go to question 3b</li> <li>Sold operations → Go to question 3c</li> <li>Amalgamated with other businesses or organizations → Go to question 3d</li> <li>Temporarily inactive but will re-open → Go to question 3e</li> </ul>				
No longer operating due to other reasons → Go to question 3f				
3a. Seasonal operations				
When did this business or organization close for the season?				
When does this business or organization expect to resume operations?				
3b. Ceased operations				
When did this business or organization cease operations?				
Why did this business or organization cease operations?				
¹ Bankruptcy				
² Liquidation				
³ Dissolution → Go to question 4				
⁴ Other Specify the other reasons why the operations ceased				

3c. Sold operations	
When was this business or organization sold?	
B00212 Date	
What is the legal name of the buyer?	
	→ Go to question 4
3d. Amalgamated with other businesses or organizations	
When did this business or organization amalgamate?	
What is the legal name of the resulting or continuing business or organization?	
What are the legal names of the other amalgamated businesses or organizations?	
	→ Go to question 4
3e. Temporarily inactive but will re-open	
When did this business or organization become temporarily inactive?	
Date	
When does this business or organization expect to resume operations?	
Date	
Why is this business or organization temporarily inactive?	
	→ Go to question 4
3f. No longer operating due to other reasons	
When did this business or organization cease operations?	
B00216 MM DD Date	
Why did this business or organization cease operations?	

4.	Verify or provide the current main activity of the business or organization identified by the legal and operating name. Note: The described activity was assigned using the North American Industry Classification System (NAICS).
	805002
	This is the current main activity → Go to next section
	This <b>is not</b> the current main activity Provide a <b>brief but precise description</b> of this business or organization's <b>main activity</b> <b>e.g.</b> , breakfast cereal manufacturing, shoe store, software development
	Ly Contraction of the second sec
_	
5.	Was this business or organization's main activity ever classified as:
	² No. Co to next continu
6.	When did the main activity change?

## **General information**

1. Was this facility in operation at least one day during the 2020 calendar year?

In operation **includes** facilities that are temporarily closed but there was some form of water use **e.g.**, water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or process water.

Select all that apply. Select all that apply. All months OR September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September September Se			cility operational?		
All months  All mo		Select all that apply.			
OR   Building and any   May   Building and any   May   Building and any   May   Building and any		B00336_tp13 All months			
* No * No Was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar year? * No * Vas * No * No * Uther facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar year? * No * Uther facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar year? * No		OR			
January May September   #00000.502 #00000.505   February June   October   Warch July   April August   December   Was the postal code for the location specified below during the 2020 calendar year? If the facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar year? If the facility was situated in more than one location during 2020 please report the postal code for the correct drainage region. No What was the postal code? Postal code Motation is being confirmed to ensure the reported figures contribute to the estimates for the correct drainage region. What was the postal code? Postal code Postal code State of the state of the postal code State of the postal		B00336_tp1	B00336_tp5	800336_tp9	
The facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar year?     No     Yes     No     Yes     No     What was the postal code?     Postal code     Summer to the source of the source			May	September	
² No ³ Yes ² No ⁴ What was the postal code? ⁴ Postal code		February	June	October	
March July November March April August December No Was the <b>postal code</b> for the location specified below during the <b>2020</b> calendar year? If the facility was situated in more than one location during <b>2020</b> please <b>report</b> the postal code for the facility in the <b>2020</b> calendar This information is being confirmed to ensure the reported figures contribute to the estimates for the correct drainage region. No What was the <b>postal code?</b> Postal code Motion April August Augu		B00336_tp3	B00336_tp7	B00336_tp11	
April August December April August December No Was the postal code for the location specified below during the 2020 calendar year? If the facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calenda This information is being configment to ensure the reported figures contribute to the estimates for the correct drainage region. What was the postal code? Postal code December		March	July	November	
² No Was the postal code for the location specified below during the 2020 calendar year? If the facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar. This information is being confirment to ensure the reported figures contribute to the estimates for the correct drainage region. ⁸⁰⁰¹²³ ¹ Yes ² No What was the postal code? Postal code ⁸⁰⁰²⁴		April	August	December	
<ul> <li>No</li> <li>Was the postal code for the location specified below during the 2020 calendar year?</li> <li>If the facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar This information is being confirmed to ensure the reported figures contribute to the estimates for the correct drainage region.</li> <li>Yes         <ul> <li>Yes</li> <li>No</li> <li>What was the postal code?</li> <li>Postal code</li> <li>Box7</li> <li>Image: Second Second</li></ul></li></ul>		· · · · · · · · · · · · · · · · · · ·			
Was the <b>2020</b> calendar year? If the facility was situated in more than one location during <b>2020</b> please <b>report</b> the postal code for the facility in the <b>2020</b> calendar This information is being confirmed to ensure the reported figures contribute to the estimates for the correct drainage region. ⁸⁰⁹¹²³ ¹ Yes ² No ² No ² No ² Postal code ⁸⁰⁰⁵⁷		No			
the 2020 calendar year?  If the facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar.  BOUT23 I Yes Ves Vhat was the postal code? Postal code BUCODF	Was		the <b>posta</b>	I code for the location specified below	during
If the facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calenda This information is being confirmed to ensure the reported figures contribute to the estimates for the correct drainage region. ⁸⁰⁰¹²³ ¹ Yes ² No What was the postal code? Postal code ⁸⁵⁰⁵⁷	the <b>202</b>	20 calendar year?	×0``		
If the facility was situated in more than one location during 2020 please report the postal code for the facility in the 2020 calendar. This information is being confirmed to ensure the reported figures contribute to the estimates for the correct drainage region. ⁸⁰⁰¹²³ ¹ Yes ² No What was the postal code? Postal code ⁸⁰⁰⁰⁵⁷					
This information is being confirmed to ensure the reported figures contribute to the estimates for the correct drainage region.	If the fac	cility was situated in more than	one location during <b>2020</b> please <b>I</b>	eport the postal code for the facility in the	2020 calendar ye
<ul> <li>¹ Yes</li> <li>² No</li> <li>What was the postal code?</li> <li>Postal code</li> <li>⁸⁵⁰⁰⁷</li> </ul>	This info	ormation is being confirmed to e	nsure the reported figures contril	oute to the estimates for the correct drainag	e region.
<ul> <li>^{B00123} <ul> <li>Yes</li> <li>No</li> </ul> </li> <li>What was the postal code?         <ul> <li>Postal code</li> <li>B50057</li> <li>Interview</li> <li>Interview</li></ul></li></ul>					
<ul> <li>² No</li> <li>What was the postal code?</li> <li>Postal code</li> </ul>	B00123	Van			
No What was the postal code? Postal code B50057		res			
What was the postal code? Postal code B50057	2	No			
Postal code		What was the postal cod	le?		
850057		Postal code			
		B50057			

3.	In 2020, what was the average number of people working on the premises of this facility in full-time equivalents (FTE)?
	Include permanent, contract and casual employees that work on the premises.
	Employment may be full-time or part-time, FTE converts part-time jobs to full-time jobs based on the hours worked. For example, if out of four employees employed at your facility one works full-time and the remaining three work the equivalent of half of a full time job, then FTE employment = $1 + \frac{1}{2} + \frac{1}{2} = 2.5$ .
	When exact figures are not available, please provide your best estimate.
	Number of people
4.	How many <b>days</b> did this facility <b>operate</b> in <b>2020</b> ?
	In operation <b>includes</b> facilities that are temporarily closed but there was some form of water use <b>e.g.</b> , water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or process water.
	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	B00338 Days
5.	How many weeks did this facility operate in 2020?
	In operation <b>includes</b> facilities that are temporarily closed but there was some form of water use <b>e.g.</b> , water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or process water.
	When exact figures are not available, please provide your best estimate.
	Weeks
6.	On average, how many days per week did this facility operate in 2020?
	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	Days per week
7.	On average, how many hours did this facility operate in a day in 2020?
	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	Hours

### Unit of measure

If you select a multiple of a unit of measure as your reporting unit, please take care to enter the correct decimal values or number of zeros when reporting water volumes in this questionnaire. **For example**, if thousands of imperial gallons is specified as the unit of measure, note that a reported quantity of 3.5 = 3,500 (3.5 thousand) imperial gallons, whereas a reported quantity of 3,500 = 3,500,000 (3.5 million) imperial gallons.

Please select only one unit of measure.

# 8. What unit of measure will be used to report water volumes throughout this questionnaire? B00522 Cubic metres (M3) Tens of cubic metres (10 M3) If you select "tens of cubic metres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 35 cubic metres. Thousands of cubic metres (1,000 M3) If you select "thousands of cubic metres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 cubic metres. Litres (L) Hectolitres (hL) If you select "hectolitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 350 litres. Thousands of litres (1,000 L) or kilolitres (kL) If you select "thousands of litres" or "kilolitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 litres. Millions of litres (1,000,000 L) or megalitres (ML) If you select "millions of litres" or "megalitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500,000 litres. Imperial gallons (imp. gal.) Thousands of US gallons (1,000 US gal.) If you select "thousands of US gallons" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 US gallons. US gallons (US gal.) Thousands of US gallons (1,000 US gal.) If you select "thousands of US gallons" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 US gallons. Millions of US gallons (1,000,000 US gal.) If you select "millions of US gallons" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500,000 US gallons. Cubic feet (cu. ft.)

Wa	iter inta	ke by source and type			
9.	Please report the <b>volume of intake water</b> for the following types and sources.				
	If the wate	r volume is zero, please enter "0" in the corresponding box.			
	When exa	ct figures are not available, please provide your best estimate.			
			2020		
			Volume of intake water		
	Free For t	<b>hwater</b> ne purpose of this survey, freshwater contains an average of 900 parts per million (ppm) or less of tota	al dissolved solids.		
	a.	Public utility	E79007_y1_sc1		
		<b>i.e.,</b> a publicly owned/operated (municipal, city or provincial) system of drawing, treating and distributing water			
	b.	Self-supplied surface water system	E79007_y1_sc2		
		i.e., lake, river			
	C.	Self-supplied groundwater system	E79007_y1_sc3		
		i.e., well, springs			
	d.	Other freshwater sources	E79007_y1_sc90		
		e.g., delivery of water from a private supplier, an adjacent industry, rain water, run-off water			
			E79007_y1_sc100		
	Sub	total volume of freshwater intake in 2020			
	For the purpose of this survey, saline or brackish water contains an average of more than 900 parts per million		n (ppm) of total dissolved solids.		
	a.		E79007_y2_sc3		
		Self-supplied groundwater system			
			E79007_y2_sc4		
	b.	Self-supplied tide water (salt water) body			
			E79007_y2_sc90		
	с.	Other saline or brackish water sources			
		e.g., delivery of water from a private supplier, an adjacent industry	F70007 v2 sc100		
	Curk	tatal ushuma of acting an brackish water intoles in 2000	L10001_92_00100		
	Sub	total volume of saline or brackish water intake in 2020			
			E79007_y100_sc100		
	Total v	olume of intake water in 2020			

Tre	eatn	nent of intake water	
10.	Plea metł	ving	
	<b>Excl</b> pleas	ude the treatment of used water, waste water or effluent. If a given volume of water undergoes more than case report the volume of water for each type of treatment.	ne treatment,
	If the	water volume is zero, please enter "0" in the corresponding box.	
	Whe	n exact figures are not available, please provide your best estimate.	
			2020 volume of intake water treated
			E79008 m1
	a.	Screening The removal of larger pieces of solid matter from water using a screen barrier. Includes the bulk screening of intake water at the source.	
			E79008_m2
	b.	Filtration	
		The removal of smaller pieces of solid matter from water using a filter barrier.	
			E79008_m3
	с.	Chlorination – disinfection	
	d	Correction and slime control	E79008_m4
	u.	Includes the control of scale, corrosion, biological growth and sludge.	
			F79008 m5
	e.	Alkalinity control	L13000_110
		The chemical treatment of water to attain required pH level.	
			E79008_m6
	f.	Hardness or water softening	
		The removal of calcium and magnesium from water to reduce hardness.	
		ŚO.	E79008_m7
	g.	Coagulation or flocculation	
		The absorption of particles in order to easily remove them from water.	
	h.	Other category of treatment - Item 1	
		Other treatments include electrolysis, de-salination, etc.	
		E/SUU/	E79008_m91
	i	Other category of treatment - Item 2	
	1.	Other treatments include electrolysis, de-salination. etc.	
		E79007	E79008_m92
	j.	Other category of treatment — Item 3	
		Other treatments <b>include</b> electrolysis, de-salination, etc.	E70008 m02
			L1000_1100

# Water intake by initial use

Exclude	recirculated or reused water, i.e., water that leaves a particular sub-system and re-enters it or is used	I in another sub-system.
If the wate When exa	er volume is zero, please enter "0" in the corresponding box.	
		2020 volume of intake wa by use
a.	Process water	
	<ul> <li>i.e., water that serves in any level of the facility process</li> <li>Include water which:</li> <li>comes in direct contact with products and/or materials</li> <li>is used in the sanitation of process equipment</li> <li>is consumed in milling and special processes</li> <li>is included in final output</li> <li>has been used for another purpose, and is undergoing its final use as process water</li> </ul>	E79009_dt1
b.	Cooling, condensing and steam i.e., water which does not come in direct contact with the products, materials or by-products of the processing operation Include: • pass-through water used in the operation of cooling or process equipment	
	<ul> <li>(including air conditioning)</li> <li>water introduced into boilers for the production of steam for either process operations or electric power.</li> </ul>	E79009_dt2
c.	Sanitary service or domestic use	E79009_dt4
	i.e., water used for toilets, janitorial services, lawn watering, washing vehicles	
d.	Other purpase or use liter 1	E79009_dt91
	Exclude water pumped by the facility and intended for initial use outside the facility.	
e.	Other purpose or use – Item 2	E79009_dt92
	<b>Exclude</b> water pumped by the facility and intended for initial use outside the facility.	
f.	Other purpose or use — Item 3	E79009_dt93
	<b>Exclude</b> water pumped by the facility and intended for initial use outside the facility.	
		E79009_dt100
Total v The sun	olume of intake water by initial use in 2020 n of the intake water should equal the amount reported at question 9.	

# Water recirculation or reuse by purpose 12. Please report the volumes of water recirculated or reused by purpose. Every time a volume of water is recirculated or reused it should be counted. Recirculated or reused water refers to water used more than once in your facility. It is water that leaves a sub-system and is then recirculated or reused in the same sub-system, or used in a different sub-system. It does not refer to water that circulates many times within the same sub-system i.e., it excludes closed-loop systems. If the water volume is zero, please enter "0" in the corresponding box. When exact figures are not available, please provide your best estimate. 2020 volume of water recirculated or reused a. Process water i.e., water that serves in any level of the manufacturing process Include water which: • comes in direct contact with products and/or materials · is used in the sanitation of process equipment E79011 dt1 • is consumed in milling and special processes • is included in final output · has been used for another purpose, and is undergoing its final use as process water b. Cooling, condensing and steam i.e., water which does not come in direct contact with the products, materials or by-products of the processing operation Include: pass-through water used in the operation of cooling or process equipment E79011_dt2 (including air conditioning) • water introduced into boilers for the production of steam for either process operations or electric power. E79011_dt90 Other purpose or use c. E79011_dt100 Total volume of water recirculated or reused in 2020

#### Treatment of discharge water

13. Please report the volumes of water according to their **final point of discharge** and **most advanced treatment** process used at this facility.

For water that is subjected to more than one type (primary, secondary or tertiary) of treatment in preparation for discharge, please report those volumes only at the most advanced treatment process that is applied; in other words, please do not double-report treated water volumes.

#### Treatment type:

- no treatment: the water that is discharged without treatment after use
- primary / mechanical treatment: the physical removal of large suspended, floating and precipitated solids from untreated wastewater using grates, screens and/or settling tanks
- secondary / biological treatment: the removal or reduction of effluent contaminants from primary wastewater treatment through the promotion of bacterial growth and other microbes that break down organic waste
- tertiary / advanced treatment: advanced cleaning of wastewater that goes beyond the secondary or biological stage, removing nutrients such as phosphorus, nitrogen, and most BOD and suspended solids through biological or chemical processes.

If the water volume is zero, please enter "0" in the corresponding box. When exact figures are not available, please provide your best estimate.

		No treatment	Primary or mechanical	Secondary or biological	Tertiary or advanced
		E79012_m8_sc1	E79012_m9_sc1	E79012_m10_sc1	E79012_m11_sc1
a.	Public sewage system				
b.	Surface freshwater bodies	E79012_m8_sc5	E79012_m9_sc5	E79012_m10_sc5	E79012_m11_sc5
c.	Tide water (ocean)	E79012_m8_sc4	E78012/m9 5c4	E79012_m10_sc4	E79012_m11_sc4
d.	Groundwater	E79012_m8_sc3	E79012_m9_sc3	E79012_m10_sc3	E79012_m11_sc3
e.	Other point of discharge	E79012 mB sc90	E79012_m9_sc90	E79012_m10_sc90	E79012_m11_sc90
Subt discl	otal volume of harge water	E79012_m8_sc100	E79012_m9_sc100	E79012_m10_sc100	E79012_m11_sc100
otal vo	blume of discharge water	r in 2020			E79012_m100_sc100

To

Mor	nthly w	ater intake and discharge		
14. I	In <b>2020</b> , v	what was the monthly water intake and discharge for this facility?		
I	If the wate	r volume is zero, please enter "0" in the corresponding box.		
\	When exa	ct figures are not available, please provide your best estimate.		
			Volume of water intake	Volume of water discharge
			E79007_tp1	E79012_tp1
	a.	January		
			E79007_tp2	E79012_tp2
	b.	February		
			E79007_tp3	E79012_tp3
	с.	March		
			E79007_tp4	E79012_tp4
	d.	April		
			E79007_tp5	E79012_tp5
	e.	May		
			E79007_tp6	E79012_tp6
	t.	June	570007 1-7	
			E/9007_tp7	E/9012_tp/
	g.	July	F70007 to8	F70012 to8
	h	August		
			E79007_tp9	E79012_tp9
	i.	September		
			E79007_tp10	E79012_tp10
	j.	October		
			E79007_tp11	E79012_tp11
	k.	November		
			E79007_tp12	E79012tp12
	I.	December		
			E79007_tp100	E79012_tp100
	Total v	plume in 2020		
15. I	If the <b>tot</b> a	al discharge volume is greater than the total intake volume, please indi	cate the <b>reasons</b> .	
		800343		
I	Reason			

16. Please report this facility's 2020 water acquisition costs. When exact figures are not available, please provide your best estimate.          a. Payment to public utility       neared for water volume reported at question 11. If possible, include only the portion paid for water and exclude sewer charges.       neared for the action of the portion of the portion paid for water and exclude sewer charges.       neared for the action of the portion of the portion paid for water and exclude sewer charges.       neared for the action of the portion paid for water and exclude sewer charges.       neared for the action of the portion paid for water and exclude sewer charges.       neared for the action of the portion paid for water and exclude sewer charges.       neared for the action of the portion paid for water and exclude sewer charges.       neared for the portion of the portion paid for water and exclude sewer charges.       neared for the portion paid for water and exclude sewer charges.       neared for the portion paid for water and exclude sewer charges.       neared for the portion paid for water and exclude sewer charges.       neared for the portion paid for water and exclude sewer charges.       neared for the portion paid for water and exclude sewer charges.       nooff         10.       Does the payment to a public utility reported at question 16 include a sewer surcharge?       nooff       nooff       nooff         11.       Does the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.       nooff       nooff       nooff         12.       No       No       No
When exact figures are not available, please provide your best estimate.         2020 cost in CANS         a. Payment to public utility         Report cost for water volume reported at question 11.         if possible, include only the portion paid for water and exclude sewer charges.         b. Annual intake licences, permits and royalties.         Please report the annual cost of intake licences, permits and royalties.         Please report the annual cost of intake licences, permits and royalties.         fill not purchase of water from another operator and/or         c. Payment for purchase of water from another operator and/or         results         industrial supplier         17. Does the payment to a public utility reported at question 16 include a sewer surcharge.         If no sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the terment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the terment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the discharge of water to a public utility to the ongoing maintenance and operation of sewer infrastructure and the discharge of water to a public utility to the ongoing maintenance and operation of sewer infrastructure and the discharge of water to a public utility to the ongoing maintenance end operation of sewer infrastructure and the discharge of water to a public utility to the ongoing maintenance end operation of sewer infrastructure and the discharge of water to a public sewage system.
every surcharge erfers to the public utility reported at question 11. For every surcharge erfers to the payment to a public utility reported at question 16 include a sewer charges. Payment for purchase d annual cost of intake licences, permits and royalties. Payment for purchase of water from another operator and/or industrial supplier Payment to a public utility reported at question 16 include a sewer surcharge? If no sewer surcharge was reported please select "Not applicable". Sewer surcharge erfers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility is water systems. Water operating and maintenance costs 18. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility woidt.
<ul> <li>a. Payment to public utility</li> <li>Report cost for water volume reported at question 11.</li> <li>If possible, include only the portion paid for water and exclude sewer charges.</li> <li>b. Annual intake licences, permits and royalties</li> <li>Please report the annual cost of intake licences, permits and royalties.</li> <li>If not purchased annually, please provide the pro-rated cost.</li> <li>c. Payment for purchase of water from another operator and/or industrial supplier</li> <li>10.</li> <li>17. Does the payment to a public utility reported at question 16 include a sewer surcharge?</li> <li>If no sewer surcharge was reported please select "Not applicable".</li> <li>Sewer surcharge of water to a public utility reported at question 16 include a sewer surcharge?</li> <li>If no sewer surcharge of water to a public utility or the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.</li> <li>Water operating and maintenance costs</li> <li>18. Please report the total 2020 operating and maintenance cost for this facility's water systems.</li> <li>Include the material, labour and energy costs incurred to operate and maintain your water systems.</li> <li>Consider the systems at your facility which:</li> </ul>
<b>b.</b> Annual intake licences, permits and royalties Please report the annual cost of intake licences, permits and royalties. Please report the annual cost of intake licences, permits and royalties. Please report the annual cost of intake licences, permits and royalties. Please report the annual cost of intake licences, permits and royalties. In output for purchase of water from another operator and/or industrial supplier 17. Does the payment to a public utility reported at question 16 include a sewer surcharge? If no sewer surcharge was reported please select "Not applicable". Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility of the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility of the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public utility operator to a public utility operator to a public utility operator operator of sever infrastructure and the treatment and discharge of water to a public utility for the ongoing maintenance cost operator operator operator operator operator operator. <b>Water operating and maintenance costs</b> 18. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs inc
<ul> <li>b. Annual intake licences, permits and royalties Please report the annual cost of intake licences, permits and royalties. Please report the annual, please provide the pro-rated cost.</li> <li>c. Payment for purchase of water from another operator and/or industrial supplier</li> <li>c. Payment to a public utility reported at question 16 include a sewer surcharge? If no sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.</li> <li>Water operating and maintenance costs</li> <li>12. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:</li> </ul>
<ul> <li>b. Annual intake licences, permits and royalties</li> <li>Please report the annual cost of intake licences, permits and royalties.</li> <li>If not purchased annually, please provide the pro-rated cost.</li> <li>C. Payment for purchase of water from another operator and/or industrial supplier</li> <li>c. Payment to a public utility reported at question 16 include a sewer surcharge?</li> <li>If no sewer surcharge was reported please select "Not applicable".</li> <li>Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.</li> <li>Yes</li> <li>No</li> <li>Not applicable</li> <li>Water operating and maintenance costs</li> <li>18. Please report the total 2020 operating and maintenance cost for this facility's water systems.</li> <li>Include the material, labour and energy costs incurred to operate and maintain your water systems.</li> </ul>
If not purchased annually, please provide the pro-rated cost.       \$
<ol> <li>Payment for purchase of water from another operator and/or industrial supplier</li> <li>Does the payment to a public utility reported at question 16 include a sewer surcharge?</li> <li>If no sewer surcharge was reported please select "Not applicable".</li> <li>Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.</li> <li>Yes         <ul> <li>Yes</li> <li>No</li> <li>No</li> <li>Not applicable</li> </ul> </li> <li>Water operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility winch:</li> </ol>
<ol> <li>Payment for purchase of water from another operator and/or industrial supplier</li> <li>Does the payment to a public utility reported at question 16 include a sewer surcharge? If no sewer surcharge was reported please select "Not applicable". Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.</li> <li>Yes         <ul> <li>No</li> <li>Not applicable</li> </ul> </li> <li>Water operating and maintenance costs</li> <li>Rease report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:</li> </ol>
<ul> <li>industrial supplier</li> <li>The sever surcharge was reported please select "Not applicable".</li> <li>Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.</li> <li>Yes</li> <li>No</li> <li>Not applicable</li> </ul> Water operating and maintenance costs 18. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:
<ul> <li>17. Does the payment to a public utility reported at question 16 include a sewer surcharge? If no sewer surcharge was reported please select "Not applicable". Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.</li> <li>Sever surcharge refers to the payment to a public sewage system.</li> <li>Yes <ul> <li>Yes</li> <li>No</li> <li>Not applicable</li> </ul> </li> <li>Water operating and maintenance costs</li> </ul> <li>18. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:</li>
If no sewer surcharge was reported please select "Not applicable". Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system. ^{B00523} ¹ ² ² ³ ² ³
Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation of sewer infrastructure and the treatment and discharge of water to a public sewage system.
the treatment and discharge of water to a public sewage system.
<ul> <li>Yes</li> <li>No</li> <li>Not applicable</li> </ul> Water operating and maintenance costs 18. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:
<ul> <li>Yes</li> <li>No</li> <li>Not applicable</li> </ul> Water operating and maintenance costs 18. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:
<ul> <li>No</li> <li>³ Not applicable</li> </ul> Water operating and maintenance costs 18. Please report the total 2020 operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:
<ul> <li>Not applicable</li> <li>Water operating and maintenance costs</li> <li>18. Please report the total 2020 operating and maintenance cost for this facility's water systems.</li> <li>Include the material, labour and energy costs incurred to operate and maintain your water systems.</li> <li>Consider the systems at your facility which:</li> </ul>
Water operating and maintenance costs         18. Please report the total 2020 operating and maintenance cost for this facility's water systems.         Include the material, labour and energy costs incurred to operate and maintain your water systems.         Consider the systems at your facility which:
Water operating and maintenance costs         18. Please report the total 2020 operating and maintenance cost for this facility's water systems.         Include the material, labour and energy costs incurred to operate and maintain your water systems.         Consider the systems at your facility which:
Water operating and maintenance costs         18. Please report the total 2020 operating and maintenance cost for this facility's water systems.         Include the material, labour and energy costs incurred to operate and maintain your water systems.         Consider the systems at your facility which:
18. Please report the total <b>2020</b> operating and maintenance cost for this facility's water systems. Include the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:
<b>Include</b> the material, labour and energy costs incurred to operate and maintain your water systems. Consider the systems at your facility which:
Consider the systems at your facility which:
bring in water     treat intake water
<ul> <li>recirculate and reuse water</li> <li>treat discharge water.</li> </ul>
When exact figures are not available, please provide your best estimate.
F61083_v100
Total cost in CAN\$ \$

19. Of the reported costs at question 18, what were the **2020 operating and maintenance costs** for the following water systems? When exact figures are not available, please provide your best estimate.

				2020 cost in CAN\$	
	a.	Intake water acquisition		F61083_v1	
		Include the material, labour and energy costs incurred to operate	\$		00.\$
			Ψ		100 0
	b.	Intake water treatment		F61083_v2	
		<b>Include</b> the material, labour and energy costs incurred to operate and maintain the systems to treat water brought into your facility.	\$		.00 \$
	c.	Water recirculation and reuse		F61083_v3	
		<b>Include</b> the material, labour and energy costs incurred to operate and maintain the systems to recirculate and reuse water in your facility.	\$		.00 \$
	d.	Discharge water treatment		F610R9. v4	
		Include the material, labour and energy costs incurred to operate and maintain the systems to treat water discharged by your facility.	\$		.00 \$
		0		F61083_v100PF1	_
	Тс	otal operating and maintenance costs in 2020	\$		.00
Otk	or	details	-		
			-		
20.	Incl	ude all relevant outlays for machinery and equipment purchases, and their installation, as well	l as f	for construction related to water in	ntake,
	aisc	harge and treatment <b>i.e.</b> , called capital outlay or capital expense.			
	Exc	harge and treatment <b>i.e.</b> , called capital outlay or capital expense.			
	Exc For	harge and treatment <b>i.e.</b> , called capital outlay or capital expense. <b>Iude</b> operating and maintenance costs. <b>example</b> , the most common capital expenditures <b>include</b> :			
	Exc For	harge and treatment <b>i.e.</b> , called capital outlay or capital expense. <b>lude</b> operating and maintenance costs. <b>example</b> , the most common capital expenditures <b>include</b> : purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation.			
	For Whe	harge and treatment <b>i.e.</b> , called capital outlay or capital expense. <b>lude</b> operating and maintenance costs. <b>example</b> , the most common capital expenditures <b>include</b> : purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate.			
	Exc For	harge and treatment i.e., called capital outlay or capital expense. lude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate.		F80134	
	Exc For Whe	harge and treatment i.e., called capital outlay or capital expense. Iude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee	harge and treatment i.e., called capital outlay or capital expense. Iude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee	harge and treatment i.e., called capital outlay or capital expense. lude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee Ca	harge and treatment i.e., called capital outlay or capital expense. lude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee	harge and treatment i.e., called capital outlay or capital expense. lude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee	harge and treatment i.e., called capital outlay or capital expense. lude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee Ca	harge and treatment i.e., called capital outlay or capital expense. Iude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. an exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	¢9	F80134	.00
	Exc For Whe	harge and treatment i.e., called capital outlay or capital expense. Iude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee	harge and treatment i.e., called capital outlay or capital expense. Iude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00
	Exc For Whee C	harge and treatment i.e., called capital outlay or capital expense. Iude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment purchase of new machinery or transportation equipment creation of new well or ground water installation. en exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	<del>\$</del>	F80134	.00
	Exc For Whee Ca	harge and treatment i.e., called capital outlay or capital expense. Iude operating and maintenance costs. example, the most common capital expenditures include: purchase and/or installation of new equipment creation of new well or ground water installation. an exact figures are not available, please provide your best estimate. apital expenditures in CAN\$	\$	F80134	.00

21. Which of the following goods, technologies and services were purchased related to water management and efficiency (including water recirculation and reuse) by this establishment during the **2020** fiscal year? Select all that apply.

#### G

Goods and technologies	
B05349_y24_p331 Software for measurement and control of water useau	
Platforms or systems for measurement and control of water use	
B05349_y24_p333 Sensors for measurement and control of water use	
B05349_y24_p89 Greywater reuse systems	
B05349_y24_p334 Equipment to reduce water consumption	
B05349_y24_p83 Water desalination equipment	
Rainwater collection equipment	
All other water management and efficiency goods and technologies	
Specify other water management and efficiency goods and technologies	$\bigcirc$
B05349_y24_p306	
OR	
B05349_y24_p341 None of the above	
Services	
Planning and design services	
B05351_y24_p300 Efficiency consulting services	
B05351_y24_p337 Laboratory service	
B05351_y24_p302 Pipe inspection services	
Piloting, validation and verification services	
B05351_y24_p303 Training and plant operation services	
B05351_y24_p305	
B05351_y24_p306	
All other water management and efficiency services	
Specify other services related to water management and efficiency 805349_y24_p306	
OR	

None of the above

B05351_y24_p341

0	
Co	ontact person
22.	Statistics Canada may need to contact the person who completed this questionnaire for further information.
	If the contact person is the same as on cover page, please check $\bigcirc$ $\rightarrow$ Go to "Feedback"
	Otherwise, who is the <b>best person to contact</b> about this questionnaire?
	First name
	Last name
	Title
	Email address (Example: user@example.gov.ca)
	<b>O</b>
	Telephone number (including area code)       Extension number       Fax number (including area code)         Example: 123-123-1234       (if applicable)       Example: 123-123-1234
Fe	edback
23.	Hours Minutes
23.	How long did it take to complete this questionnaire? Include the time spent gathering the necessary information.
23. 24.	How long did it take to complete this questionnaire? Include the time spent gathering the necessary information. We invite your comments about this questionnaire.
23. 24.	Hours Minutes How long did it take to complete this questionnaire? Include the time spent gathering the necessary information. We invite your comments about this questionnaire.
23.	Hours Minutes How long did it take to complete this questionnaire? Include the time spent gathering the necessary information.  We invite your comments about this questionnaire.
23. 24.	Hours Minutes How long did it take to complete this questionnaire? Include the time spent gathering the necessary information We invite your comments about this questionnaire.
23.	Hours Minutes Prove this questionnaire? Include the time spent gathering the necessary information. We invite your comments about this questionnaire.
23.	Hours Minutes Hours Minutes Include the time spent gathering the necessary information
23.	Hours Minutes Hours Minutes Hours Minutes Moure spent gathering the necessary information
23.	How long did it take to complete this questionnaire? Include the time spent gathering the necessary information. We invite your comments about this questionnaire. B0002
23.	Hours Minutes Include the time spent gathering the necessary information
23.	Hours       Minutes         Hours       Minutes         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         We invite your comments about this questionnaire.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         B0007       Include the time spent gathering the necessary information.       Include the time spent gathering the nece
23.	Hours       Minutes         Hours       Minutes         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         We invite your comments about this questionnaire.       Include the time spent gathering the necessary information.         B0002       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.       Include the time spent gathering the necessary information.         Include the time spent gathering the time spent gat
23.	Hours Minutes Hours complete this questionnaire? We invite your comments about this questionnaire.
23.	Hours       Minutes         Include the time spent gathering the necessary information.       Image: Complete this questionnaire.         Image: Complete this questionnaire.       Image: Complete this questionnaire.

#### Confidentiality

#### Your answers are confidential.

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the *Statistics Act*. Statistics Canada will use the information from this survey for statistical purposes.

#### **Data-sharing agreements**

To reduce respondent burden, Statistics Canada has entered into data sharing agreements with provincial and territorial statistical agencies and other government organizations, which have agreed to keep the data confidential and use them only for statistical purposes. Statistics Canada will only share data from this survey with those organizations that have demonstrated a requirement to use the data.

**Section 11** of the *Statistics Act* provides for the sharing of information with provincial and territorial statistical agencies that meet certain conditions. These agencies must have the legislative authority to collect the same information, on a mandatory basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not requested and businesses may not object to the sharing of the data.

For this survey, there are **Section 11** agreements with the provincial and territorial statistical agencies of Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, and the Yukon. The shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

**Section 12** of the *Statistics Act* provides for the sharing of information with federal, provincial or territorial government organizations.

Under **Section 12**, you may refuse to share your information with any of these organizations by writing a letter of objection to the Chief Statistician, specifying the organizations with which you do not want Statistics Canada to share your data and mailing it to the following address:

Chief Statistician of Canada Statistics Canada Attention of Director, Enterprise Statistics Division 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6.

You may also contact us by email at statcan.esd-helpdeskdse-bureaudedepannage.statcan@canada.ca or by fax at 613-951-6583.

For this survey, there are **Section 12** agreements with the statistical agencies of Prince Edward Island, the Northwest Territories and Nunavut as well as with Environment Canada.

For agreements with provincial and territorial government organizations, the shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

#### Record linkages

To enhance the data from this survey and to minimize the reporting burden, Statistics Canada may combine it with information from other surveys or from administrative sources.

Thank you for completing this questionnaire. Please retain a copy for your records. Visit our website, www.statcan.gc.ca

Manufacturing Industries

#### CONFIDENTIAL once completed.

2020 Biennial Industrial Water Survey: Mineral Extraction Industries Selon nos dossiers votre langue de préférence est l'anglais, si vous préférez recevoir ce document en français, veuillez nous appeler au numéro sans frais suivant : 1-866-445-4323 ou ATS 1-855-382-7745



This information is collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S-19. COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THIS ACT.

### Introduction

#### Survey purpose

Statistics Canada conducts this survey every two years to collect detailed information on water use by manufacturing, mining, and electrical power generating industries in Canada.

The survey will ask about the following for your operation and/or facility:

- the sources of water
- · the treatment of water before it's used
- the initial uses of water
- · the recirculation and reuse of water
- · the treatment of water before it's discharged
- · the ultimate points of water discharge
- the monthly breakdown of water intake and discharge
- the costs of acquiring water, maintaining and operating the water systems, and discharging water.

This survey collects information that will help Canadians understand how industries use water across the country. The data are used to produce Statistics Canada's Physical flow account of Water Use in Canada, and Environment and Climate Change Canada's water indicator: Water withdrawal and consumption by sector. Government and private sector analysts use the data to formulate water policies.

Your information may also be used by Statistics Canada for other statistical and research purposes.

#### Security of emails and faxes

Statistics Canada advises you that there could be a risk of disclosure during facsimile or email. However upon receipt, Statistics Canada will provide the guaranteed level of protection afforded all information collected under the authority of the *Statistics Act*.

**Note:** Our online questionnaires are secure, there is no risk of data interception when responding to Statistics Canada online surveys.

#### Confidentiality

The *Statistics Act* protects the confidentiality of information collected by Statistics Canada.

#### Please return the questionnaire within 28 days.

Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at 1-888-883-7999.

If you are unable to complete within 28 days **OR** if you need help, call us at **1-866-445-4323** or **TTY 1-855-382-7745**.

Statistics Canada Operations and Integration Division 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6

Visit our website, www.statcan.gc.ca

5120.1: 2021-03-11



# **Canad**ä

Reporting instructions	
Please provide your best estimate when exact figures are no	t available
<ul> <li>Please enter "0" in the corresponding box if the water volum</li> </ul>	e is zero.
Business or organization and contact inform	ation
1. Verify or provide the business or organization's legal and on Note: Legal name modifications should only be done to correct a spelling error Note:	operating name and correct where needed.
l egal name	Operating name (if applicable)
2. Verify or provide the contact information of the designate	ed business or organization <b>contact person</b> for this guestionnaire
and correct where needed. Note: The designated contact person is the person who should receive this of	uestionnaire. The designated contact person may not always be the one who
actually completes the questionnaire.	Last name
Title	Preferred language of communication
	English French
Mailing address (number and street)	
City	Province, territory or state
Postal code or ZIP code	
Example: A9A 9A9 or 12345-1234	
Country	
Email address	
Example: user@example.gov.ca	
Telephone number (including area code)	on number
Example: 123-123-1234 (if appli	cable)
Fax number (including area code)	
Example: 123-123-1234	
	020100702020
■ IBSF — 2020 Bienniai industrial water Survey: H Mineral Extraction Industries	age 2 020190703020

3. Verify or provide the current operational status of the business or organization identified by the legal and operating name above.
¹ Operational → Go to question 4
<ul> <li>Not currently operational</li> <li>e.g., temporarily or permanently closed, change of ownership</li> </ul>
<ul> <li>Why is this business or organization not currently operational?</li> <li>BO0000</li> <li>Seasonal operations → Go to question 3a</li> <li>Ceased operations → Go to question 3b</li> <li>Sold operations → Go to question 3c</li> <li>Sold operations → Go to question 3c</li> <li>Amalgamated with other businesses or organizations → Go to question 3d</li> <li>Temporarily inactive but will re-open → Go to question 3e</li> <li>No longer operating due to other reasons → Go to question 3f</li> </ul>
3a. Seasonal operations
When did this business or organization close for the season?
When does this business or organization expect to resume operations?
B00218 Date Go to question 4
3b. Ceased operations
When did this business or organization cease operations?
B00211 Date
Why did this business or organization cease operations?
¹ Bankruptcy
² Liquidation
³ Dissolution $\Rightarrow$ Go to question 4
⁴ Other Specify the other reasons why the operations ceased

3c.	Sold operations	
	When was this business or organization sold?	
	YYYY MM DD B00212	
	Date	
	What is the legal name of the buyer?	
	800406	$\rightarrow$ Go to question 4
3d.	Amalgamated with other businesses or organizations	
	When did this business or organization amalgamate?	
	B00213	4
	Date	N
	What is the legal name of the resulting or continuing business or organization?	0,
	C	
	What are the legal names of the other amalgamated businesses or organizations?	
		➔ Go to question 4
3e.	Temporarily inactive but will re-open	
	When did this business or organization become temporarily inactive?	
	When does this business or organization expect to resume operations?	
	Date	
	Why is this business or organization temporarily inactive?	
		→ Go to question 4
3f.	No longer operating due to other reasons	
	When did this business or organization cease operations?	
	YYYY MM DD	
	Date	
	Why did this business or organization cease operations?	
	B00314	

4. Verify or provide the current main activity of the business or organization identified by the legal and operating name Note: The described activity was assigned using the North American Industry Classification System (NAICS).	
805002	
R05002	
¹ This is the current main activity <b>→ Go to next section</b>	
² This is not the current main activity Provide a brief but precise description of this business or organization's main activity e.g., breakfast cereal manufacturing, shoe store, software development	
805003	
5. Was this business or organization's main activity ever classified as:	
² No → Go to next section	
6. When did the main activity change?	

## **General information**

In operation **includes** operations that are temporarily closed but there was some form of water use **e.g.**, water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or process water.

Vinich months was th	this operation operational?
Select all that apply.	
B00336_tp13	
Airmontins	
OR	
B00336_tp1	B00336_tp5 B00336_tp9
January	May September
B00336_tp2	B00336_tp6 B00336_tp10
March	July November
B00336_tp4	B00336_tp12
April	August
No	
No	
No	below located in
No /as the operation <b>specified b</b> uring the <b>2020</b> calendar year	below located in
No /as the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo	below located in r? nore than one location during 2020 please report the province or territory for the last l
No /as the operation <b>specified k</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend his information is being confirme	below located in r? hore than one location during 2020 please <b>report</b> the province or territory for the <b>last l</b> hdar year.
No /as the operation <b>specified k</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend his information is being confirme	below located in r? nore than one location during 2020 please <b>report</b> the province or territory for the <b>last l</b> ndar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend his information is being confirme	below located in r? nore than one location during 2020 please report the province or territory for the last l ndar year. ed to ensure the reported figures contribute to the correct provincial or territorial estin
No Vas the operation <b>specified k</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend nis information is being confirme Yes	below located in r? nore than one location during 2020 please report the province or territory for the last l ndar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend his information is being confirme Yes No	below located in r? nore than one location during 2020 please report the province or territory for the last l ndar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend is information is being confirme Yes No In which <b>province or</b>	below located in r? hore than one location during 2020 please report the province or territory for the last l indar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim r territory was the operation last located?
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend his information is being confirme Yes No In which <b>province or</b> Select all that apply.	below located in r? nore than one location during 2020 please report the province or territory for the last in ndar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim r territory was the operation last located?
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo is information is being confirme Ves No In which <b>province or</b> Select all that apply.	below located in r? noter than one location during 2020 please report the province or territory for the last in ndar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim r territory was the operation last located?
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend is information is being confirme Yes No Ves No In which <b>province or</b> Select all that apply. B50039 01 Newfoundland	below located in         r?         nore than one location during 2020 please report the province or territory for the last lead ryear.         ed to ensure the reported figures contribute to the correct provincial or territorial estime         r territory was the operation last located?         and Labrador       06       11         Yukon
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend is information is being confirme Yes No In which <b>province or</b> Select all that apply. ^{B50039} ⁰¹ Newfoundland ⁰² Prince Edward	below located in r? hore than one location during 2020 please report the province or territory for the last lindar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim r territory was the operation last located? and Labrador 10 11 11 12 12 12 12 14 12 14 14
No Vas the operation <b>specified b</b> the operation was situated in mo the operation in the 2020 calendar is information is being confirme Ves No In which <b>province or</b> Select all that apply. ^{B50039} ⁰¹ Newfoundland ⁰² Prince Edward ⁰³ Nova Scotia	below located in         r?         nore than one location during 2020 please report the province or territory for the last I ndar year.         ed to ensure the reported figures contribute to the correct provincial or territorial estim         r territory was the operation last located?         and Labrador       06         07       Manitoba         08       Saskatchewan         13       Nunavut
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend is information is being confirme Yes No In which <b>province or</b> Select all that apply. B50039 01 Newfoundland 02 Prince Edward 03 Nova Scotia 04 New Brunswick	below located in r?         nore than one location during 2020 please report the province or territory for the last I ndar year.         ed to ensure the reported figures contribute to the correct provincial or territorial estim         r territory was the operation last located?         and Labrador       06         06       Ontario         11       Yukon         Island       07         08       Saskatchewan         13       Nunavut         14       Nunavut
No Vas the operation <b>specified b</b> uring the <b>2020</b> calendar year the operation was situated in mo the operation in the 2020 calend is information is being confirme Ves No Ves No In which <b>province or</b> Select all that apply. B50039 01 Newfoundland 02 Prince Edward 03 Nova Scotia 04 New Brunswick 05 Ouchors	below located in r? nore than one location during 2020 please report the province or territory for the last I ndar year. ed to ensure the reported figures contribute to the correct provincial or territorial estim r territory was the operation last located? and Labrador ⁰⁶ Ontario ¹¹ Yukon Island ⁰⁷ Manitoba ¹² Northwest Territories ⁰⁸ Saskatchewan ¹³ Nunavut k ⁰⁹ Alberta ¹⁰ British Columbia

3.	In <b>2020</b> , what was the <b>average number of people</b> working on the premises of this operation in full-time equivalents (FTE)?
	Include permanent, contract and casual employees that work on the premises.
	Employment may be full-time or part-time, FTE converts part-time jobs to full-time jobs based on the hours worked. For example, if out of four employees employed at your operation one works full-time and the remaining three work the equivalent of half of a full time job, then FTE employment = $1 + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2.5$ .
	When exact figures are not available, please provide your best estimate.
	Number of people
4.	How many days did this operation operate in 2020?
	In operation <b>includes</b> operations that are temporarily closed but there was some form of water use <b>e.g.</b> , water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or process water.
	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	Days .
5.	How many weeks did this operation operate in 2020?
	In operation <b>includes</b> operations that are temporarily closed but there was some form of water use <b>e.g.</b> , water for sanitary services like toilets and janitorial services, water use for cooling, condensing and steam or process water.
	When exact figures are not available, please provide your best estimate.
	Weeks
6	On average, how many days per week did this operation operate in 2020?
0.	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	00341
	Days per week
7.	On average, how many hours did this operation operate in a day in 2020?
	Days refers to calendar days.
	When exact figures are not available, please provide your best estimate.
	B00342

### Unit of measure

If you select a multiple of a unit of measure as your reporting unit, please take care to enter the correct decimal values or number of zeros when reporting water volumes in this questionnaire. **For example**, if thousands of imperial gallons is specified as the unit of measure, note that a reported quantity of 3.5 = 3,500 (3.5 thousand) imperial gallons, whereas a reported quantity of 3,500 = 3,500,000 (3.5 million) imperial gallons.

Please select only one unit of measure.

# 8. What unit of measure will be used to report water volumes throughout this questionnaire? B00522 Cubic metres (M3) Tens of cubic metres (10 M3) If you select "tens of cubic metres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 35 cubic metres. Thousands of cubic metres (1,000 M3) If you select "thousands of cubic metres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 cubic metres. Litres (L) Hectolitres (hL) If you select "hectolitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 350 litres. Thousands of litres (1,000 L) or kilolitres (kL) If you select "thousands of litres" or "kilolitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 litres. Millions of litres (1,000,000 L) or megalitres (ML) If you select "millions of litres" or "megalitres" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500,000 litres. Imperial gallons (imp. gal.) Thousands of US gallons (1,000 US gal.) If you select "thousands of US gallons" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500 US gallons. US gallons (US gal.) Thousands of US gallons (1,000 US gal.) If you select "thousands of US gallons" as your unit of measure, 3.5 reported in the guestionnaire will be counted as 3,500 US gallons. Millions of US gallons (1,000,000 US gal.) If you select "millions of US gallons" as your unit of measure, 3.5 reported in the questionnaire will be counted as 3,500,000 US gallons. Cubic feet (cu. ft.)

Wa	nter inta	ke by source and type	
9.	Please re	port the <b>volume of intake water</b> for the following types and sources.	
	If the wate	er volume is zero, please enter "0" in the corresponding box.	
	When exa	ct figures are not available, please provide your best estimate.	
			2020
			volume of intake water
	D. Even	huundha a	
	For the	nwater ne purpose of this survey, freshwater contains an average of 900 parts per million (ppm) or less of tot	al dissolved solids.
	a.	Public utility	E79007_y1_sc1
		i.e., a publicly owned/operated (municipal, city or provincial) system of drawing, treating and distributing water	
	b.	Self-supplied surface water system	E79007_y1_sc2
		i.e., lake, river	
	C	Self-supplied groundwater system	E79007_y1_sc3
	0.	i.e., well, springs	
		O`	
	d.	Other freshwater sources	E79007_y1_sc90
		e.g., delivery of water from a private supplier, an adjacent industry, rain water, run-off water Exclude bottled water intended for personal consumption.	
			E79007_y1_sc100
	Sub	total volume of freshwater intake in 2020	
	► Salin For th	ne or brackish water ne purpose of this survey, saline or brackish water contains an average of more than 900 parts per millior	n (ppm) of total dissolved solids.
			E79007_y2_sc3
	a.	Self-supplied groundwater system	
		i.e., weil, spiritg	E79007 v2 sc4
	b.	Self-supplied tide water (salt water) body	
		i.e., estuary, bay, ocean	
	_		E79007_y2_sc90
	c.	e.g., delivery of water from a private supplier, an adjacent industry	
			E79007_y2_sc100
	Sub	total volume of soline or brackich water intake in 2020	
	500		
			E79007_y100_sc100
	Total v	olume of intake water in 2020	

Tre	eatn	nent of intake water	
10.	Plea metl	se report the volume of <b>intake water treated</b> within this operation <b>prior to initial use</b> for the for nods of treatment.	llowing
	<b>Excl</b> pleas	ude the treatment of used water, waste water or effluent. If a given volume of water undergoes more than c se report the volume of water for each type of treatment.	ne treatment,
	If the	water volume is zero, please enter "0" in the corresponding box.	
	Whe	n exact figures are not available, please provide your best estimate.	
			2020 volume of intake water treated
	-	Correction	E79008_m1
	a.	The removal of larger pieces of solid matter from water using a screen barrier. Includes the bulk screening of intake water at the source.	
			E79008_m2
	b.	Filtration	
		The removal of smaller pieces of solid matter from water using a filter barrier.	
	c.	Chlorination – disinfection	E79008_m3
		The addition of chlorine or other disinfectants to water.	
	d.	Corrosion and slime control	E79008_m4
		Includes the control of scale, corrosion, biological growth and sludge.	
	e.	Alkalinity control	E79008_m5
		The chemical treatment of water to attain required pH level.	
	f.	Hardness or water softening	E79008_m6
		The removal of calcium and magnesium from water to reduce hardness.	
			E79008_m7
	g.	Coagulation or flocculation The absorption of particles in order to easily remove them from water.	
	h	Other category of treatment — Item 1	
		Other treatments include electrolysis, de-salination, etc.	
		E79007	E79008_m91
	i.	Other category of treatment — Item 2	
		Other treatments <b>include</b> electrolysis, de-salination, etc.	
		E/900/	E79008_m92
	j.	Other category of treatment — Item 3	
		Other treatments <b>include</b> electrolysis, de-salination, etc.	E79008_m93

# Water intake by initial use

11.	Please re	port the volumes of intake water by initial use.	
	Exclude real of the wate	ecirculated or reused water, <b>i.e.</b> , water that <b>leaves</b> a particular sub-system and <b>re-enters</b> it or is <b>use</b> r volume is zero, please enter "0" in the corresponding box.	<b>d in another</b> sub-system.
	When exa	ct figures are not available, please provide your best estimate.	
			2020 volume of intake water by use
	a.	Process water	
		<ul> <li>i.e., water that serves in any level of the mining process</li> <li>Include water which:</li> <li>comes in direct contact with products and/or materials</li> </ul>	
		<ul> <li>is used in the sanitation of process equipment</li> <li>is consumed in milling and special processes</li> </ul>	
		<ul> <li>is included in final output</li> <li>bas been used for another purpose, and is undergoing its final use as process water</li> </ul>	E79009_dt1
		• has been used for another purpose, and is undergoing its final use as process water.	
	b.	Cooling, condensing and steam	
		i.e., water which does not come in direct contact with the products, materials or by-products of the processing operation	
		Include:	
		(including air conditioning)	E79009_dt2
		operations or electric power.	
			E79009_dt4
	с.	Sanitary service or domestic use	
			F79009 dt91
	d.	Other purpose or use — Item 1 <b>Exclude</b> water pumped by the operation and intended for initial use outside the operation	
	e.	Other purpose or use – Item 2	E79009_dt92
		<b>Exclude</b> water pumped by the operation and intended for initial use outside the operation	
	f.	Other purpose or use – Item 3	E79009_dt93
		Exclude water pumped by the operation and intended for initial	
	Total v	plume of intake water by initial use in 2020	E79009_dt100
	The sum	of the intake water should equal the amount reported at question 9.	
			E61333_dt1
12.	Of the to	al volume of intake water for process in 2020, what volume of water was consumed	
	or lost?	•••••••••••••••••••••••••••••••••••••••	
			E61333_dt2
13.	Of the top	al volume <b>of intake water for cooling, condensing or steam production</b> in <b>2020</b> , ume of water was consumed or lost?	
14	Of the test	al volume water taken in by this an arctica in 2000, what we have affinted a water	E61333_dt8
14.	was used	as injected water or steam in the secondary recovery of oil or natural gas?	

# Water recirculation or reuse by purpose 15. Please report the volumes of water recirculated or reused by purpose. Every time a volume of water is recirculated or reused it should be counted. Recirculated or reused water refers to water used more than once in your operation. It is water that leaves a sub-system and is then recirculated or reused in the same sub-system, or used in a different sub-system. It does not refer to water that circulates many times within the same sub-system i.e., it excludes closed-loop systems. If the water volume is zero, please enter "0" in the corresponding box. When exact figures are not available, please provide your best estimate. 2020 volume of water recirculated or reused a. Process water i.e., water that serves in any level of the mining process Include water which: · comes in direct contact with products and/or materials · is used in the sanitation of process equipment E79011 dt1 • is consumed in milling and special processes • is included in final output · has been used for another purpose, and is undergoing its final use as process water b. Cooling, condensing and steam i.e., water which does not come in direct contact with the products, materials or by-products of the processing operation Include: · pass-through water used in the operation of cooling or process equipment E79011 dt2 (including air conditioning) · water introduced into boilers for the production of steam for either process operations or electric power. E79011_dt90 c. Other purpose or use E79011_dt100 Total volume of water recirculated or reused in 2020

16. [ #	Does this operation have a <b>tailings pond</b> ? A tailings pond is an excavated pit that forms an open laggoon where liquid effluent or wastewater from the processing of ore is held. ^{05225_df6} ¹ Yes Please report the <b>volume of water recirculated or reused</b> from tailings pond in <b>2020</b> . When exact figures are not available, please provide your best estimate. ^{E79011_df6} Volume
	² No
17. [ F	Does this operation <b>inject water into an oil bearing formation</b> ? For this survey, "oil bearing formation" refers to a geological formation that produces or contains oil.
	Pese report the volume of water injected in 2020. When exact figures are not available, please provide your test estimate. Unume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume Volume

#### Treatment of discharge water

18. Please report the volumes of water according to their **final point of discharge** and **most advanced treatment** process used at this operation.

For water that is subjected to more than one type (primary, secondary or tertiary) of treatment in preparation for discharge, please report those volumes only at the most advanced treatment process that is applied; in other words, please do not double-report treated water volumes.

#### Treatment type:

- no treatment: the water that is discharged without treatment after use
- primary / mechanical treatment: the physical removal of large suspended, floating and precipitated solids from untreated wastewater using grates, screens and/or settling tanks
- secondary / biological treatment: the removal or reduction of effluent contaminants from primary wastewater treatment through the promotion of bacterial growth and other microbes that break down organic waste
- tertiary / advanced treatment: advanced cleaning of wastewater that goes beyond the secondary or biological stage, removing nutrients such as phosphorus, nitrogen, and most BOD and suspended solids through biological or chemical processes.

If the water volume is zero, please enter "0" in the corresponding box. When exact figures are not available, please provide your best estimate.

		No treatment	Primary or mechanical	Secondary or biological	Tertiary or advanced
		E79012_m8_sc1	E79012_m9_sc1	E79012_m10_sc1	E79012_m11_sc1
a.	Public sewage system				
b.	Surface freshwater bodies	E79012_m8_sc5	E79012_m9_sc5	E79012_m10_sc5	E79012_m11_sc5
		E79012_m8_sc4	E79012_m9_sc4	E79012_m10_sc4	E79012_m11_sc4
c.	Tide water (ocean)				
		E79012_m8_sc3	E79012_m9_3	E79012_m10_sc3	E79012_m11_sc3
d.	Groundwater				
		E79012_m8_sc6	E79012_m9_sc6	E79012_m10_sc6	E79012_m11_sc6
e.	Tailings pond				
f.	Injecting to producing formations	E79012_m8_sc7	E79012_m9_sc7	E79012_m10_sc7	E79012_m11_sc7
		E79012_m8_sc90	E79012_m9_sc90	E79012_m10_sc90	E79012_m11_sc90
g.	Other point of discharge				
Sub [†] disc	total volume of harge water	E79012_m8_sc100	E79012_m9_sc100	E79012_m10_sc100	E79012_m11_sc100
otal v	olume of discharge water	r in 2020			E79012_m100_sc100

Т

Monthly v	vater intake and discharge		
19. In <b>2020</b> ,	what was the monthly water intake and discharge for this operation?		
If the wat When exa	er volume is zero, please enter "0" in the corresponding box. In figures are not available, please provide your best estimate.		
		Volume of water intake	Volume of water discharge
		E79007_tp1	E79012_tp1
a.	January		
b.	February	E79007_tp2	E79012_tp2
		E79007_tp3	E79012_tp3
с.	March		
d		E79007_tp4	E79012_tp4
a.	Aprii	E79007 tp5	E79012 tp5
e.	Мау	0	
f	lune	E79007_tp6	E79012_tp6
		E79007_tp7	E79012_tp7
g.	July		
h.	August	E79007_tp8	E79012_tp8
	<u> </u>	E79007_tp9	E79012_tp9
ι.	September	F70007 to10	F70012 tn10
j.	October	£13001_\$10	213012_010
		E79007_tp11	E79012_tp11
k.	November		
Ι.	December	E79007_tp12	E79012tp12
		E79007_tp100	E79012_tp100
Total	olume in 2020		
20. Of the to	tal volume of <b>water discharged</b> by this operation in <b>2020</b> , what volume of from the mine to allow operations to continue)?	originated as <b>mine wa</b> t	ter (water that was
Mine wat When exa	er can come from more than one source <b>e.g.</b> , rain and storm run-off, ground water act figures are not available, please provide your best estimate.		
	E79013		
Volume			
IBSP — 2020	iennial Industrial Water Survey Page 15		423001200151

Wa	ter acquisition costs		
21.	Please report this operation's <b>2020</b> water acquisition costs.		
	When exact figures are not available, please provide your best estimate.		
		2020 cost in CANS	\$
	a Rayment to public utility		
	<b>Report</b> cost for water volume reported at question 11.	F62551_sr1	
	If possible, <b>include</b> only the portion paid for water and <b>exclude</b> sewer charges.	\$	.00
	b. Annual intake licences, permits and royalties	F62551_sr2	
	Please <b>report</b> the annual cost of intake licences, permits and royalties. If not purchased annually, please provide the pro-rated cost.	\$	.00
	<ul> <li>Payment for purchase of water from another operator and/or industrial supplier</li> </ul>	F62551_sr3	
		\$	.00
22.	Does the payment to a public utility reported at question 16 include a sewer surcharg	e?	
	If no sewer surcharge was reported please select "Not applicable".		
	Sewer surcharge refers to the payment to a public utility for the ongoing maintenance and operation the treatment and discharge of water to a public sewage system.	on of sewer infrastructure and	
	³ Not applicable		
	Not applicable		
Wa	ter operating and maintenance costs		
23.	Please report the total 2020 operating and maintenance cost for this operation's water	systems.	
	Include the material, labour and energy costs incurred to operate and maintain your water system	าร.	
	Consider the systems at your operation which:		
	<ul> <li>bring in water</li> <li>treat intake water</li> <li>recirculate and reuse water</li> </ul>		
	treat discharge water.		
	When exact lightes are not available, please provide your best estimate.		
		F61083_v100	
	Total cost in CAN\$	\$	.00

24. Of the reported costs at question 23, what were the **2020 operating and maintenance costs** for the following water systems? When exact figures are not available, please provide your best estimate.

				2020 cost in CAN\$	
	a.	Intake water acquisition		F61083_v1	
		<b>Include</b> the material, labour and energy costs incurred to operate and maintain the systems that bring water into your operation.	\$		.00
	b.	Intake water treatment		F61083_v2	
		<b>Include</b> the material, labour and energy costs incurred to operate and maintain the systems to treat water brought into your operation.	\$		.00
	c.	Water recirculation and reuse		F61083 v3	
		<b>Include</b> the material, labour and energy costs incurred to operate and maintain the systems to recirculate and reuse water in your operation.	\$		.00
	d.	Discharge water treatment		F61083 v4	
		Include the material, labour and energy costs incurred to operate and maintain the systems to treat water discharged by your operation.	\$	3	.00
		0		F61083_v100PF1	
	Тс	otal operating and maintenance costs in 2020	\$		.00
_	_		_		
Oth	er	details			
25.	In <b>2</b>	020, what were this operation's capital expenditures on water intake, discharge or	tre	atment facilities?	
	<b>Incl</b> disc	<b>ude</b> all relevant outlays for machinery and equipment purchases, and their installation, as well harge and treatment <b>i.e.</b> , called capital outlay or capital expense.	as f	for construction related to water in	ntake,

**Exclude** operating and maintenance costs.

For example, the most common capital expenditures include:

- purchase and/or installation of new equipment
- purchase of new machinery or transportation equipment
- creation of new well or ground water installation.

When exact figures are not available, please provide your best estimate.

Capital expenditures in CAN\$	\$ .00

26. Which of the following goods, technologies and services were purchased related to water management and efficiency (including water recirculation and reuse) by this establishment during the **2020** fiscal year? Select all that apply.

#### G

Goods and technologies
B05349_y24_p331 Software for measurement and control of water useau
Platforms or systems for measurement and control of water use
Sensors for measurement and control of water use
Greywater reuse systems
Water desalination equipment
Rainwater collection equipment
All other water management and efficiency goods and technologies
B05349_y24_p306
B05349_y24_p341 None of the above
Services
Planning and design services
Efficiency consulting services
Pipe inspection services
Piloting, validation and verification services
Training and plant operation services
Augmentation ou diminution de la demande du marché
All other water management and efficiency services
Specify other services related to water management and efficiency B05349_y24_p306

# OR

B05351_y24_p341

None of the above

C	ontact person
07	
27	. Statistics Canada may need to contact the person who completed this questionnaire for further information.
	If the contact person is the same as on cover page, please check • + Go to "Feedback"
	Otherwise, who is the best person to contact about this questionnaire?
	First name
	Last name
	Title
	Email address (Example: user@example.gov.ca)
	I elephone number (including area code)Extension numberFax number (including area code)Example: 123-123-1234(if applicable)Example: 123-123-1234
Fe	eedback
	Hours Minutes
28	How long did it take to complete this questionnaire?     Include the time spent gathering the necessary information
29	. We invite your comments about this questionnaire.
	800002

#### Confidentiality

#### Your answers are confidential.

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the *Statistics Act*. Statistics Canada will use the information from this survey for statistical purposes.

#### **Data-sharing agreements**

To reduce respondent burden, Statistics Canada has entered into data sharing agreements with provincial and territorial statistical agencies and other government organizations, which have agreed to keep the data confidential and use them only for statistical purposes. Statistics Canada will only share data from this survey with those organizations that have demonstrated a requirement to use the data.

**Section 11** of the *Statistics Act* provides for the sharing of information with provincial and territorial statistical agencies that meet certain conditions. These agencies must have the legislative authority to collect the same information, on a mandatory basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not requested and businesses may not object to the sharing of the data.

For this survey, there are **Section 11** agreements with the provincial and territorial statistical agencies of Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, and the Yukon. The shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

**Section 12** of the *Statistics Act* provides for the sharing of information with federal, provincial or territorial government organizations.

Under **Section 12**, you may refuse to share your information with any of these organizations by writing a letter of objection to the Chief Statistician, specifying the organizations with which you do not want Statistics Canada to share your data and mailing it to the following address:

Chief Statistician of Canada Statistics Canada Attention of Director, Enterprise Statistics Division 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6.

You may also contact us by email at statcan.esd-helpdeskdse-bureaudedepannage.statcan@canada.ca or by fax at 613-951-6583.

For this survey, there are **Section 12** agreements with the statistical agencies of Prince Edward Island, the Northwest Territories and Nunavut as well as with Environment Canada.

For agreements with provincial and territorial government organizations, the shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

#### Record linkages

To enhance the data from this survey and to minimize the reporting burden, Statistics Canada may combine it with information from other surveys or from administrative sources.

Thank you for completing this questionnaire. Please retain a copy for your records. Visit our website, www.statcan.gc.ca