



Environmental Public Health Department
 Population and Public Health
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Application for an Approval to Establish, Extend, Renovate or Alter a Public Water Supply

This form and guideline details the information to be submitted by any person wishing establish, extend, renovate or alter a public water supply. This application form has been prepared in accordance with Section 5 of *The Health Hazard Regulations, 2002*.

Please ensure that each section of the application is completed in a concise and clear manner.

If you are applying for an **approval to establish, extend, renovate or alter** a public water supply, the application must be completed and forwarded to your Regional Health Authority Office as noted below at least one month prior to the planned construction of a new or significantly altered public water supply.

Regional Health Authority Offices:

Saskatoon Health Region Saskatoon - Ph: (306) 655-4605	Sun Country Health Region Weyburn - Ph: (306) 842-8618	Prince Albert Parkland Health Region Prince Albert - Ph: (306) 765-6600
Sunrise Health Region Yorkton - Ph: (306) 786-0600	Regina Qu'Appelle Health Region Regina - Ph: (306) 766-7755	Cypress Health Region Swift Current - Ph: (306) 778-5280
Kelsey Trail Health Region Melfort - Ph: (306) 752-6310	Heartland Health Region Rosetown - Ph: (306) 882-6413 ext 3	Mamawetan Churchill River Health Region LaRonge - Ph: (306) 425-8512
Five Hills Health Region Moose Jaw - Ph: (306) 691-1500	Prairie North Health Region North Battleford - Ph: (306) 446-6400	Keewatin Yatthe Health Region Buffalo Narrows – Ph: (306) 425-8512

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Overall Review of the Waterworks System

The applicant wishing to the establish, extend, renovate or alter a public water supply shall ensure that all information with respect to the source of the water supply; the design of the water supply system; building facilities, materials, and equipment (including treatment devices) that are part of the public water supply and distribution system; and design flow rates has been submitted. Manufacturer's technical information on equipment design and operations should be attached to the application. Further information may be requested by the Regional Health Authority if it is believed that the submitted information is not sufficient.

Instructions

- Section I – All Applicants should complete this Section
- Section II – All Applicants should complete this Section
- Section III – Where a new source of water will be utilized, this section should be completed.
- Section IV – Where treatment processes or a distribution system will be used, this section should be completed.
- Section V – Where new water storage, raw water transmission lines or treated water distribution lines will be constructed, this section should be completed.
- Section VI – This is an optional section for providing details of the construction. It is recommended that this is completed for all applications.

Section I – Administrative Information

1. Premises name: (in full) _____

2. Location of water supply system: Legal land description or GPS _____
 RM or City/Town: _____

3. Mailing information: Address: _____
 City/Town: _____ Prov/State: _____ Postal Code: _____

4. Owner's Name: _____ Mailing Address: _____
 City/Town: _____ Prov/State: _____ Postal Code: _____

5. Operator's Name: _____ Telephone: _____ (h) _____ (w) _____ (c) _____

6. Emergency Contact
 Name: _____ Telephone: _____ (h) _____ (w) _____ (c) _____
 Name: _____ Telephone: _____ (h) _____ (w) _____ (c) _____

7. Construction application additional details
 Name of Consultant/Engineer/Designer/Supplier: _____
 Mailing Address/Postal Code: _____
 Estimated cost of project \$ _____ Phone Number: _____

8. Please give the proposed project schedule and construction start date: _____

(Note: At least 30 days should be allotted for the regulatory review.)

9. Description of the works

Brief description of the works to be constructed, altered or decommissioned

10. General and detailed plans of the proposed works:
 are enclosed with this application form;
 will be forwarded by (Date) _____

Signature

I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, this information is true, complete and accurate.

 Printed Name of Person Signing

 Title

 Address

 Postal Code

 Telephone Number

 Fax Number

 Date of Application

 Signature

Section II – Water Supply System General Information

1. What is the source of water? New or Existing
- Water Hauler (name)_____ Well River
- Lake Cistern (water source)_____ Other: _____
- Spring Dugout

2. Facilities Served (check all apply):
- | | | | |
|---|--|---|--|
| <input type="checkbox"/> Non Potable | <input type="checkbox"/> Outfitter | <input type="checkbox"/> Wayside Area | <input type="checkbox"/> Public Eating Establishment |
| <input type="checkbox"/> Campground | <input type="checkbox"/> Food Processor Licensed | <input type="checkbox"/> Food Processor (Other) | <input type="checkbox"/> B&B/Vacation Farms |
| <input type="checkbox"/> Urban Municipal Well | <input type="checkbox"/> Food Distributor | <input type="checkbox"/> Group Home | <input type="checkbox"/> Water Haulers |
| <input type="checkbox"/> Rural Municipal Well | <input type="checkbox"/> Recreational Area | <input type="checkbox"/> Special Care Home | <input type="checkbox"/> Limited Scope Pipeline |
| <input type="checkbox"/> Trailer Park | <input type="checkbox"/> Residential | <input type="checkbox"/> Hospital | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Daycare | <input type="checkbox"/> Personal Care Home | <input type="checkbox"/> Hotel/Motel | |
| <input type="checkbox"/> School | | <input type="checkbox"/> Special Event | |

Describe the type of usage (e.g. 15 hotel rooms, 5 seasonal cabins, etc)

3. Sampling Requirements
- Bacteriological: Frequency_____ (i.e. Month, Week, Year)
- Major Ion: Frequency_____ (i.e. Month, Week, Year)
- Other _____: Frequency_____ (i.e. Month, Week, Year)

4. Facilities are Year-round Seasonal
- If seasonal: Month Opening Date:_____ Month Closing Date: _____

5. Backflow Prevention
- If proposed, do truck fill stations have backflow prevention devices? Yes No
- Is there backflow prevention installed to prevent water from flowing back to the well? Yes No
- Type of Backflow Prevention
- Vacuum breaker Double check valve (DCV) Single check valve
- Reduced pressure valve Testable DCV Other:_____
- Describe location of each valve: _____
-

6. Describe the proposed usage of the water from the proposed system:
- | | | |
|--|--|---|
| <input type="checkbox"/> Drinking | <input type="checkbox"/> Fire Suppression / prevention | <input type="checkbox"/> Commercial Use _____ |
| <input type="checkbox"/> Cooking | <input type="checkbox"/> Personal Hygiene | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Irrigation | <input type="checkbox"/> Agricultural Use (e.g. livestock watering, chemical mixing) | |
| <input type="checkbox"/> Domestic (toilet flushing, etc) | | |

7. Approximate maximum number of people served by this water supply (under maximum conditions): _____

8. What are the flow rates for the plant?

Flows	Average Daily Flow	Maximum Daily Flow	Plant Service Flow Rate
Current (N/A if new PW supply)			
Design			

If this is an existing water system, please answer the following question.

1. Has this water supply system experienced:
- | | | | |
|---|------------------------------|-----------------------------|---------------------------------|
| • water quantity problems (e.g. not enough water) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |
| • water quality issues | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |
| • unacceptable levels of coliforms | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |
| • precautionary drinking water advisory (PDWA) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |
| • emergency boil water order (EBWO) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |
| • Other problems:_____ | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |

If yes, please explain: _____

Section III – New Water Source Technical Data

1. If the source is a well or spring, please fill out the following table.

Well information	Well # _____	Well # _____
Water Rights License No		
Well Name/number		
Water usage (e.g. year-round, seasonal, backup, etc)		
Well Type (i.e. construction method: artesian, drilled, dug, driven, sand point, bored)		
Casing type (concrete, fibreglass, metal, wood, plastic, other)		
Pump Type (e.g. centrifugal, hand, jet, submersible)		
Well completion depth (m)		
Water depth (m)		
Location (e.g. Legal Description Sec-Twp- Rge-Mer or description)		
Well Drilling Contractor		
Date Well Came Into Production (Month/Year)		
Does casing extend 60 cm above ground? (yes, no, unsure)		
Watertight well lid and screen vent(s)? (yes, no, unsure)		
Production Rate (L/s)		
Land slope and characteristics surrounding well (e.g. sloped away, in a depression, etc)		

If available, attach a well driller's report or log (may be available from the Sask. Watershed Authority Ph: 306-694-3930)

2. If the source is a dugout, river, lake, please fill out the following table.

Name of source _____
 Point of diversion: LSD ___ SEC ___ TWP ___ RG ___ M ___ OR Latitude: _____ Longitude: _____ OR
 Description: _____
 Intake location: _____
 Description of submerged intake marking (if applicable): _____
 Raw water pump house location: _____ On stream: _____ Off stream: _____
 Saskatchewan Watershed Authority Licence to Divert No (if applicable): _____ Date issued: _____
 Raw water pumping (please complete the following table).

Unit	Power Rating (kw) (1Hp = 0.745 kw)	Capacity (L/S)

3. Please describe the piping system, if present, that conveys raw water from the source to the water treatment plant.

4. List the existing water quality and the proposed water quality after treatment.

- Water quality attached Water quality unavailable Water quality to be forwarded

5. The following potential contamination sources are within 30m (100 ft) of the well or surface water withdrawal point?

- Chemical or fuel storage Livestock Well(s) – active
 Landfill or refuse storage Wildlife Well(s) – abandoned
 Manure storage or application Onsite Sewage System Other concern: _____

6. The following potential contamination sources are within 300m (1000 ft) of the well or surface water withdrawal point?

- Chemical or fuel storage Livestock Well(s) – active
 Landfill or refuse storage Wildlife Well(s) – abandoned
 Manure storage or application Onsite Sewage System Other concern: _____

Section IV – New Water Infrastructure Technical Data

1. What water treatment units are proposed? (Attach additional technical information, if available.)

(Check the boxes for each treatment that is or will be used)

- Aeration
- Coagulation/Flocculation
- Softening
- Algae Control
- Iron Removal
- Distillation
- Other: _____
 - o Sedimentation
 - o Oxidation (chemical) _____

- Filtration*
- Biological Filtration (SS)
 - High Rate Sand
 - Cartridge
 - Reverse Osmosis
 - Other _____
 - o Diatomaceous Earth (DE)
 - o Activated Carbon Contactor

2. Is Disinfection being provided?

- Calcium Hypochlorite
- Sodium Hypochlorite
- Ultraviolet Light
- Other _____

3. Water Metering:

a) Please list all flow monitoring locations

	First Location	Second Location	Third Location
Meter Location (e.g. Raw water, Truck fill etc)			
Units (e.g. Imperial Gallons/ Cubic Meters/ Other)			

b) Is there meters in the distribution system (i.e. residential, commercial, industrial, public/government or any combination: Yes No

Please list all sampling locations for bacteriological, turbidity and chlorine residual (within the treatment process):

4. What water treatment units are proposed? (Attach additional technical information, if available.)

- Aeration: Description: _____
- Distillation: Description: _____
- Pre-oxidation: Description: _____
- Flocculation
Number of flocculants: _____ Description: _____
- Clarification/Sedimentation

Number	Surface Area (m ² or ft ²)	Volume (m ³ or ft ³)	Shape

Description of operation and location (if not located to treat all water) _____

- Granular Filtration
Number of filters _____
Type of filter (circle one) Pressure / Gravity
Filtration Method (circle one) High rate / Slow sand / Diatomaceous earth

Filter (and filter method)	Filter Media	Surface Area (m ² or ft ²)	Filtration Rate (m/h or gpm/ft ²)

Description of operation (e.g. filter to waste, backwash timing, etc) and location (if not located to treat all water):

Section V – Water Piping and Storage System Technical Data

1. Is a distribution system present or proposed? Yes No If yes, number of service connections: _____

2. Where one of the items listed below is present, check the box and provide the specific information.

Raw Water Storage

Location	Approximate Useable Capacity m ³	Type On-stream or Off-stream, Etc.	How Often is it Filled and When

Are the raw water reservoirs aerated? Yes No If yes, please identify method of aeration: _____

Method of algae control if any _____

Raw Water Transmission Pipe

Pipe diameter (inches or mm)	Approximate Length (ft or m)	Pipe Material & Certification

Treated Water Storage Reservoir

No.	Elevated, Surface, Underground, or Pressure Tank	Construction Material	Volume (imperial gallons or liters)	Location (Street address, legal land description)

Treated Water Pumping (attach pump information)

Unit	Power Rating (kw) (1HP = 0.745 kw)	Capacity (L/s)

Emergency Pumping: (attach pump information)

Unit	Power Rating (kw) (1HP = 0.745 kw)	Capacity (L/s)

Distribution System Pipe

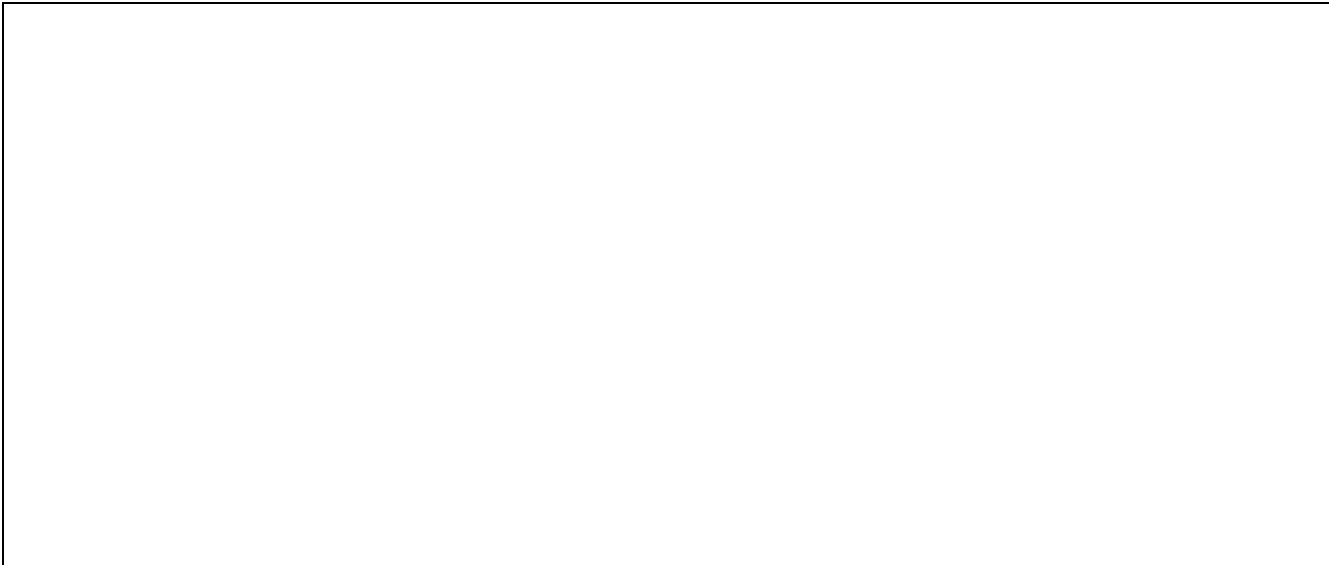
Pipe diameter (inches or mm)	Approximate Length (ft or m)	Pipe Material & Certification

Please describe the method of distribution system installation including depth:

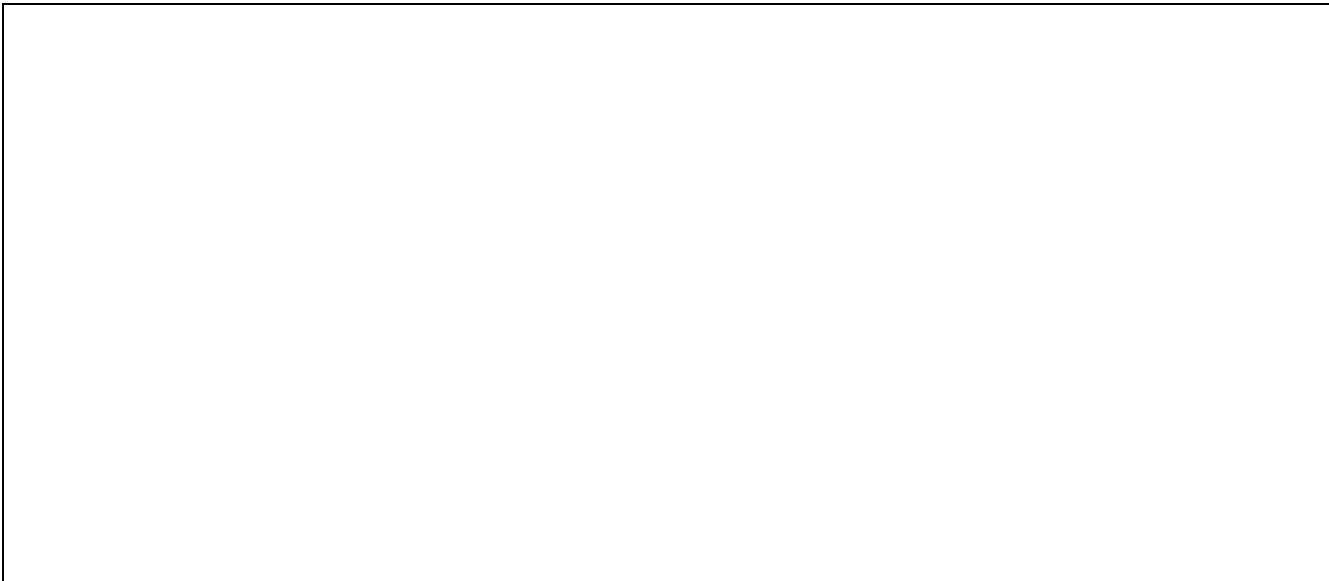
Please describe any locations where a sewer line and a water line are within 10 meters of each other:

Section VI – Water Supply System Diagrams

Site Plan - Please indicate the proposed and/or existing source water location(s) on the site plan below with respect to the following items (if applicable): property lines, sewage and waste disposal systems, location of underground storage, all intermittent, natural and artificial bodies of water, other wells including abandoned wells, access roads, structures, livestock areas other areas that may be potential sources of contamination. Attach copies of professional drawings if available. Attach additional sheets if extra space is required.



Flow Diagram - Please indicate the following items (if applicable) on the flow diagram of the proposed and existing water system below: all equipment and treatment devices, detailed equipment plan indicating all types of treatment devices and operational equipment, including their intended use, water distribution lines, and hydrants/flushouts, and their connections to all water users. Be sure to indicate the direction path of flow through the system. Attach copies of professional drawings if available. Attach additional sheets if extra space is required.



For more information call the Environmental Public Health Department at 655-4605
