



Application For a Permit to Construct and/or Operate a Waterworks

EPB 226 Apr/10

This form and guideline details the information to be submitted by any person wishing to obtain a waterworks permit. This application form has been prepared in accordance with section 22 of The Environmental Management and Protection Act, 2002 (EMPA) for the issuance of a permit under Section 23

Information is to be submitted as part of either an application for a permit to construct a new or significantly altered waterworks, and/or for the application to operate a waterworks. Please ensure that each section of the application is completed in a concise and clear manner.

Waterworks system includes water well or surface water intake, water supply line, water treatment plant, storage, pumping and distribution systems and pipelines.

Please indicate the purpose of this Application:

- Permit to Construct** and/or
 Permit to Operate

- If you are applying for a **“Permit to Operate”** a waterworks, the application must be completed and forwarded to your Environmental Protection Branch Office as noted below at least two months prior to the expiry date of the existing Permit for the waterworks or at least two months prior to the commissioning of a new or significantly altered waterworks.

Environmental Protection Branch Offices

Estevan Office PO Box 5000, 1302 3rd St. Estevan SK S4A 0S1 Phone: (306) 637-4604 Fax: (306) 637-4603	Melville Office 256 2 nd Ave. W., Box 2170 Melville SK S0A 2P0 Phone: (306) 728-7492 Fax: (306) 728-7447	Prince Albert Office PO Box 3003 Prince Albert SK S6V 6G1 Phone: (306) 953-3369 Fax: (306) 953-2502	Swift Current Office 350 Cheadle Street West Swift Current SK S9H 4G3 Fax: (306) 778-8212 Phone: (306) 778-8685
La Ronge Office PO Box 5000 La Ronge SK S0J 1L0 Phone: (306) 425-4581 Fax: (306) 425-2580	Moose Jaw Office 206-110 Ominica St. W. Moose Jaw SK S6H 6V2 Phone: (306) 694-3586 Fax: (306) 694-3743	Regina Office 3211 Albert Street Regina SK S4S 5W6 Fax: (306) 787-0197 Phone: (306) 787-6504	Watrous Office PO Box 1128 403 Main Street Watrous SK S0K 4T0 Phone: (306) 946-3233 Fax: (306) 946-3221
Meadow Lake Office Unit 1 – 101 Railway Place Meadow Lake SK S9X 1E6 Fax: (306) 236-7677 Phone: (306) 236-7645	North Battleford Office 108-1146 102 nd St. North Battleford SK S9A 1E9 Fax: (306) 446-7464 Phone: (306) 446-7683	Saskatoon Office 102-112 Research Drive Saskatoon SK S7K 2H6 Phone: (306) 933-8367 Fax: (306) 933-8442	Yorkton Office 120 Smith Street Yorkton SK S3N 3V3 Fax: (306) 786-5716 Phone: (306) 786-1424
Melfort Office PO Box 6500 107 Crawford Avenue E. Melfort SK S0E 1A0 Phone: (306) 752-6129 Fax: (306) 752-6218			

- If you are applying for a **“Permit to Construct”** a waterworks, the application must be completed and forwarded to:

Municipal Branch
Saskatchewan Ministry of Environment
4th Floor, 3211 Albert Street
REGINA SK. S4S 5W6
Telephone: (306) 787-6517
Fax: (306) 787-0197

Application Table Of Contents

- Section I - Administrative Information – Page 1
- Section II - Waterworks System (Technical Data) – Page 2
- Section III - Treated Water Distribution System – Page 5
- Section IV - Laboratory Monitoring – Page 5
- Section V – Overall Review of the Waterworks System – Page 6
- Section VI - Signature Page – Page 6

Section I: Administrative Information

- Name of the Municipality/Company for which the Permit is being applied:

- Name and Address of the Owner (Municipality/Commission/Company):

Name: _____

Address: _____

Contact Person: _____ Position _____

Telephone: _____ Fax: _____

3. **Construction** application additional details

Name of Consultant/Engineer: _____

Postal Address/Postal Code: _____

Estimated cost of project \$ _____ Phone Number: _____

General and detailed plans of the proposed works:

- are enclosed with this application form;
- will be forwarded by (Date) _____

Brief description of the works to be constructed

Works will be:

- constructed on, or
- exist on, and
- affect the following lands or areas. Applications must have an Information Services Corporation of Saskatchewan (ISC) Parcel Number(s). Works will be constructed on or exist on and affect the following lands or areas. The ISC Parcel Number, full legal description (1/4 Section, Township, Range and Meridian) and the owners or occupants names must be provided for the lands or areas on which works will be constructed and/or will be affected. To contact ISC please telephone 1-866-275-4721.

ISC Parcel Number	Land Description	Registered Owner	Applicant's Interest in Land

4. Operating staff and person(s) responsible for the day to day operation of the waterworks system

Name	Position	Certification		Contact Telephone Number
		Number	Class	

5. Identify the method of public notification (as per The Water Regulations, 2002 Section 44 (1)):

- a) Quality of water produced or supplied by the waterworks in comparison with the levels set out in the Regulations _____
- b) Compliance with sample submission requirements described in current Permit to operate Waterworks _____

6. Existing Permit or Permit to Operate **Number** for this Facility:

Expiry Date of the Permit: _____ Permit Holder: _____

7. Are you requesting any changes or alterations to the existing Permit? Yes _____ No _____. If yes, details of the request shall be provided as per Part V, Table 1 (Section IV) of this application.

8. **Heritage Assessment:**

All rural pipeline projects, subdivisions, lagoons and projects with an areal impact will need to have an initial review called a Heritage Resource Review (HRR). This will determine if a broader Heritage Resource Impact Assessment (HRIA) is necessary. Areal impact is simply an impact over an area that potentially has heritage issues (i.e. a lagoon expansion requires a HRR but adding an extra filter inside an existing treatment plant does not require a HRR.) HRRs must be performed as early in the project as possible, often prior to submitting this application to Environment. If you wish a ruling on whether your water and sewer project needs a HRR, please contact the Drinking Water Quality Section of Environment at (306) 787-6517 and ask to speak to an Approvals Engineer. If your project needs a HRR, please complete and forward the Heritage Resource Review Referral Form – Water and Sewer Works Form available on the internet (<http://www.tpcs.gov.sk.ca/HeritageReviewForms>) along with a single-page basic site plan to Archaeological Resource Management, Ministry of Tourism Parks, Culture and Sport, 9th Floor 1919 Saskatchewan Drive, Saskatchewan, S4P 4H2. Fax (306) 787-0069 or Telephone (306) 787-8157 / 787-5774 / 787-2848 / 787-5753.

Please select from the following;

- this project requires a Heritage Resource Review (HRR)
- the Heritage Resource Review (HRR) is underway, results will be faxed to (306) 787-0197
- the Heritage Resource Review (HRR) results are attached
- this project requires a Heritage Resource Impact Assessment (HRIA)
- the Heritage Resource Impact Assessment (HRIA) results are attached

9. First Nations and Metis Consultations:

Consultation must take place before any project or other activity that could adversely affect Treaty or Aboriginal rights is developed or put in place. The proponent must start the Consultation as early in the project development process as possible; we advise suitable time must be allotted if a Consultation is needed. To determine whether your project needs a Consultation with First Nations and Métis People, to determine the content and scope and scale of the Consultation, or if you have any other questions regarding Consultation please contact the Drinking Water Quality Section of Environment at (306) 787-6517 and ask to speak to an Approvals Engineer. Proponents undertaking Consultation will typically be required to perform information sharing and issue identification and adjustments and reporting to Environment. If you have contact with another provincial ministry before you have contacted Environment, ask that ministry to conduct any required Consultation. If Consultation has been or is being done with another agency please indicate below as only one Consultation is typically required. Further information is available in the publication *Government of Saskatchewan Interim Guide for Consultation with First Nations and Métis People*, January 2008 (<http://www.fnmr.gov.sk.ca/documents/policy/consultguide.pdf> online).

Please select from the following;

- Environment indicates this project requires a First Nation and Metis Consultation
- a First Nation and Metis Consultation is being considered by another agency
- a First Nation and Metis Consultation has been completed by another agency ____
- the First Nation and Metis Consultation results are attached
- Environment indicates the First Nation and Metis Consultation is completed

Section II: Waterworks System (Technical Data)

1. Present population served by the waterworks system: _____

Flows	Average Daily Flow	Maximum Daily Flow	Peak Hourly Flow
Current			
Design			

2. Are there any other municipality(ies), development(s) or commissions/companies outside the municipal boundaries obtaining human consumptive use water from the waterworks system (other than truck haul)? Yes ____ No ____
If yes, please provide a complete list and address with name of contact person and approximate annual flows or population.

Name	Contact Person	Phone No.	Annual Flow or Population

3. Are there any truck fill stations? Yes ____ No _____. If yes, how many? _____
Are the truck fill stations metered? Yes ____ No _____. Average monthly flows _____
Do the truck fill stations have backflow prevention devices ? Yes ____ No _____.

4. Raw Water Supply:

- Surface supply: Name of source _____
Point of diversion: LSD ____ SEC ____ TWP ____ RG ____ M ____
Latitude: _____ Longitude: _____
Intake location: _____
- Raw water pump house location: _____ On stream: _____ Off stream: _____
Saskatchewan Watershed Authority Licence to Divert No.: _____
Date issued: _____
- Raw water pumping (please complete the following table).

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

- Groundwater source (please complete the following table).

Water Rights Licence No.	Well No.	Legal Description Sec-Twp-Rge-Mer.	Date Well Came Into Production Month/Year	Well Completion Depth (m)	Intake Depth (m)	Present Annual Water Use (m ³) per Year	Production Rate (L/s)	Rated Pump Capacity (L/s)
			/					
			/					
			/					

5. Number of raw water storage reservoirs

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

- Are the raw water reservoirs aerated? Yes _____ No _____
If yes, please identify which ones and method of aeration: _____
- Intake from reservoir (fixed or adjustable) _____
- Method of algae control if any _____

6. Water Metering - Please list all flow monitoring locations:

a) Monitoring in the Treatment Process:

- Raw water monitoring location: _____
- Treated water monitoring location: _____
- Other monitoring location: _____

b) In the distribution system (ie. residential, commercial, industrial, public/government or any combination of):

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

7 Water Treatment:

- Legal land description of the water treatment facility: LSD ___ Sec ___ Tp ___ Rg ___ W ___ M ___;
- Latitude _____ Longitude _____ or other (i.e. street address): _____
- No treatment: _____
- Disinfection only method: _____
- Aeration Type of aeration: _____
- Pressure filtration: _____
- Number of pressure filters: _____
- Filter media _____
- Iron removal: _____
- Manganese Removal: _____
- Other specify: _____
- Conventional treatment process: _____
- Pre-oxidation method: _____
- Flocculation: _____ Number of flocculants: _____ Velocity gradient #1 _____ #2 _____
- Clarification/Sedimentation: _____

Number	Design Capacity	Retention Time	Volume	Rise Rate

- Filtration Number of filters _____ Type of filter _____ Filter media: _____

Filter	Filter Media	Surface Area	Design Loading Rate m/h

8. Inventory of chemicals used. (Please identify all the chemicals used seasonally or continuously, including chlorine as a pre-oxidant or disinfectant)

Chemical Name	Months used / Continuous	Its Purpose	Point of Injection

9. Disinfection (chlorine gas, sodium hypochlorite, calcium hypochlorite, ozonation, chlorine dioxide, ultra violet, others)

Type: _____ Point of application: _____

Disinfection contact time at design flows prior to entering distribution: _____

10. Fluoridation: Yes: _____ No: _____

Type of chemical: _____ Chemical supplier: _____

Bylaw No.: _____ Date passed: _____

11. Other treatment (please provide details and design criteria)

12. Disposal and handling of wastewater from plant

Type of Waste Stream	Method of Disposal	Monitoring
Clarifier Blow down		
Lime Sludge		
Filter Backwash		
Filter to Waste		
Other (Specify)		

Section III Treated Water Distribution System

1. Treated Water Storage Reservoir: Total volume of treated water storage _____ (m³)

No.	Elevated, Surface, or Underground	Construction Material	Volume (m ³)	Location (Street address, legal land description)

2. Treated Water Pumping

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

3. Treated Water Distribution Pumps

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

4. Emergency Pumping: Total capacity of emergency pumps _____ (L/s)

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

Section IV: Laboratory and Monitoring

1. Additional on-site process monitoring carried out by the municipality/commission/company beyond permit requirements (check the appropriate monitoring and frequency).

Type of Measurement	Number of Analysis per Week
<input type="checkbox"/> Chlorine residual (in the plant)	
<input type="checkbox"/> Chlorine residual (in the distribution system)	
<input type="checkbox"/> pH (raw)	
<input type="checkbox"/> pH (treated)	
<input type="checkbox"/> Turbidity (raw)	
<input type="checkbox"/> Turbidity (after filter)	
<input type="checkbox"/> Turbidity (treated)	
<input type="checkbox"/> Iron (raw)	
<input type="checkbox"/> Iron (treated)	
<input type="checkbox"/> Manganese (raw)	
<input type="checkbox"/> Manganese (treated)	
<input type="checkbox"/> Fluoride concentration	
<input type="checkbox"/> Others (Specify)	

Section V: Overall Review of the Waterworks System

The information required on Table 1 must be submitted as part of any application to construct a new or significantly altered waterworks and for the application to operate a waterworks in accordance with Section 22 the Environmental Management Protection Act, 2002.

Note: The extent of information required would depend on the applicant's circumstance to ensure they have adequately addressed each issue. It is important that it be as clear and concise as possible. The suggested format for submission of the required information should be followed.

Table 1: Permit Application Information Requirement

Information Requirement	Comments and Suggested Format
1. A general description of the waterworks system should be provided.	Suggest a map of the area showing the location of the following landmarks be provided: <ul style="list-style-type: none"> the raw water supply intake/well or surface runoff area; any raw water reservoirs or pump stations; water treatment plant; and treated water reservoir and pump stations if any.
2. A brief description of the waterworks system to meet future demands.	The applicant should address the following: <ul style="list-style-type: none"> quality and quantity of the raw water supply source to meet long term demand; capability of the water treatment facility to meet the treated water quality as outlined in <u>The Water Regulations, 2002</u> and community's quantity demand; and an outline of water conservation programs, if any, to control excess water use.
3. A description of the wastestreams discharged from the water treatment plant, if any and any possible impact.	Quality and quantity of the waste streams discharged should be identified, including any environmental impact which may be experienced by the disposal method of the water treatment wastes.
4. A copy of the Permit for which a renewal is being requested and a summary of the past performance of the system in relation to that Permit.	This provides information on how well the system has been performing in relation to Permit requirements. It is suggested a table be prepared that lists each Permit requirement, actual performance/compliance related to that requirement and any comments that are relevant.
5. Any problems or complaints regarding the system during the previous Permit period and how they have been handled.	Problems or complaints with the existing system will be a factor in determining if the Permit renewal should be granted without additional conditions. In general, it is expected that every effort will be made to correct and prevent system performance problems and that complaints will be followed-up and addressed in a timely and appropriate manner.
6. Any changes or alterations to the Permit that are being requested.	It is suggested that all requested changes or alterations to the existing Permit be presented in tabular form. The table would list the current requirement, the requested change and the reason for the requested change.
7. Any emergency response plans the applicant has to deal with any possible major problems/failures that could occur to the waterworks system.	If the applicant has a formal emergency response plan a copy should be submitted with the application. In the absence of such a plan, the applicant should briefly outline the procedure that would be followed in the event of major problems with the waterworks system such as: <ul style="list-style-type: none"> water shortage, raw water quality problems, treatment plant problems (alternative water supply source should be identified and assessed); and high coliform counts, low chlorine residual.

Section VI: Signature Page

The sections of The Environmental Management and Protection Act, 2002 and The Waterworks Regulations, 2002 that are of particular relevance to waterworks system are:

- i) The Environmental Management and Protection Act, 2002 Part 4, Division 1 (Regulation of Water Quality)
- ii) The Environmental Management and Protection Act, 2002 Part 4 Division 2 (Drinking Water and Waste Water)
- iii) The Water Regulations, 2002 Part V (Waterworks)

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