

Application for Water Treatment Facility Classification

Please print clearly or type and follow instructions on application.
NOTE: If using Adobe Reader text can be inserted into form and tab between fields.

This application is pursuant to the Water and Wastewater Facility Operators Regulation issued under The Environment Act.

Name of Facility:

Name of Facility Owner:
(Municipality/Commission/
Company/Individual/etc)

Civic Address of Facility:
(Section/township/range & Municipality
or Street location)

Mailing Address of Owner:

Postal Code:

Telephone:

Contact Person:

Position:

Cell or Pager:

Fax:

Email:

Please complete the following. The information provided will be used to classify the water treatment facility under the Water and Wastewater Facility Operators Regulation. In some cases actual numbers or answers must be supplied, but in most cases it will only be necessary to check the appropriate criteria.

Forward the completed form to:

Director
Environmental Assessment &
Licensing Branch
Manitoba Conservation
160 – 123 Main Street
Winnipeg MB R3C 1A5

Please direct questions to:

Curtis Holowachuk
(204) 945-7065 ph
(204) 945-5229 fax

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**** Refer to Guidelines for Water Plant Classification for aid in Form Completion ****

| SYSTEM | | | |
|---------------|--|--|--|
| | New or proposed Facility seeking classification (not currently in operation) | | |
| | Proposed start of operations (month/year) _____. | | |
| | Existing Facility seeking classification (in operation prior to December 31, 2005) | | |
| | Facility has been in operations since (approximate month/year) _____. | | |

| SIZE (refer to Supplemental Information for point designation) (2 point minimum to 20 point maximum) | | | | |
|---|--|---|--------------------------------|------|
| 1. | Maximum population or part served, peak day | # | | 1-10 |
| 2. | Design flow average day Estimated or Actual (Circle volume option & units) | | m ³ /day gal/day | 1-10 |
| | OR Peak month's flow average day Estimated or Actual | | m ³ /day gal/day | |

| WATER SUPPLY SOURCE (choose one) | | | |
|---|--|--|---|
| 1. | Groundwater | | 3 |
| 2. | Groundwater under the influence of surface water | | 5 |
| 3. | Surface water | | 5 |

| RAW WATER | | | |
|------------------|---|--|------|
| 1. | Average raw water quality varies enough to require treatment changes 10% of the time or more: (choose a value from 0-10 points) | | 0-10 |
| | <ul style="list-style-type: none"> • Little or no variation (0 points) | | |
| | <ul style="list-style-type: none"> • High variation (raw water quality subject to periodic serious industrial pollution) (10 points) | | |
| 2. | Raw water quality is subject to or has elevated: | | |
| | <ul style="list-style-type: none"> • Taste or odour level, or both | | 3 |
| | <ul style="list-style-type: none"> • Disinfection by-product formation (potential) | | 3 |

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| CHEMICAL TREATMENT OR ADDITION PROCESSES (choose all that apply) | | | |
|---|---|--|----|
| 1. | Chlorine dioxide (for disinfection or otherwise) | | 10 |
| 2. | Chlorine, gaseous (for disinfection or otherwise) | | 8 |
| 3. | Chlorine, liquid or powdered (for disinfection or otherwise) | | 5 |
| 4. | Chloramination | | 8 |
| 5. | Fluoridation | | 5 |
| 6. | Ozonization (on-site generation) | | 10 |
| 7. | pH adjustment (calcium carbonate, carbon dioxide, hydrochloric acid, calcium oxide, calcium hydroxide, sodium hydroxide, sulphuric acid, other) | | 4 |
| 8. | Stability or corrosion control (calcium oxide, calcium hydroxide, sodium carbonate, sodium hexametaphosphate, other) | | 4 |
| 9. | Pre-oxidation (potassium permanganate, other) | | 2 |

| COAGULATION PROCESSES (choose all that apply) | | | |
|--|--------------|--|---|
| 1. | Coagulation | | 5 |
| 2. | Flocculation | | 5 |

| CLARIFICATION AND SEDIMENTATION PROCESSES (choose all that apply) | | | |
|--|---|--|----|
| 1. | Horizontal - flow (rectangular basins) | | 5 |
| 2. | Horizontal - flow (round basins) | | 7 |
| 3. | Up-flow solid-contact sedimentation (includes coagulation & flocculation) | | 15 |
| 4. | Inclined-plate sedimentation or tube sedimentation, or both | | 7 |
| 5. | Sedimentation (other) <i>Describe</i> | | 5 |
| 6. | Dissolved air flotation | | 30 |

| FILTRATION PROCESSES (choose all that apply) | | | |
|---|--------------------------|--|----|
| 1. | Rapid gravity filtration | | 10 |

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| | | | |
|----|--|--|----|
| 2. | Canister, bag or cartridge filtration | | 5 |
| 3. | Granular activated charcoal filtration | | 5 |
| 4. | Slow sand filtration | | 10 |

OTHER TREATMENT PROCESSES *(choose all that apply)*

| | | | |
|-----|--|--|----|
| 1. | Aeration | | 2 |
| 2. | Packed tower aeration | | 5 |
| 3. | Ion-exchange softening | | 5 |
| 4. | Lime-soda ash softening | | 20 |
| 5. | Chemical algae control | | 2 |
| 6. | Powdered activated carbon | | 2 |
| 7. | Disinfection by ultraviolet irradiation | | 7 |
| 8. | Membrane filtration | | 12 |
| 9. | Pressure or greensand filtration | | 10 |
| 10. | Electrodialysis | | 15 |
| 11. | Actiflo™ or other ballasted Flocculation | | 15 |
| 12. | Special processes | | 15 |

RESIDUALS DISPOSAL *(choose all that apply)*

| | | | |
|----|---|--|---|
| 1. | Discharge to sewer system or receiving waters | | 0 |
| 2. | Discharge to sludge ponds | | 2 |
| 3. | Mechanical dewatering | | 5 |
| 4. | Land application | | 5 |
| 5. | Solids composting | | 5 |

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| INSTRUMENTATION <i>(choose one)</i> | | | |
|--|---|--|---|
| 1. | SCADA or similar instrumentation systems are used to provide: <i>(0 min to 6 pts maximum)</i> | | |
| | • Data with no process operation | | 0 |
| | • Data with limited process operation | | 2 |
| | • Data with extensive or total process operation | | 6 |
| 2. | Clearwell OR reservoir size less than average day or design flow | | 5 |

| LABORATORY CONTROL ¹ <i>(choose all that apply) (0 point minimum to 13 point maximum)</i> | | | |
|---|--|--|-------|
| 1. | Bacteriological <i>(0 point minimum to 3 point maximum)</i> | | |
| | • Lab work done outside the facility | | 0 |
| | • Coliform determination (completed by facility staff) | | 3 |
| 2. | Chemical / Physical <i>(0 point minimum to 10 point maximum)</i> | | |
| | • Lab work done outside the facility | | 0 |
| | • Push button or colorimetric tests such as chlorine or pH <i>(List tests)</i> | | 1 – 3 |
| | • Additional procedures such as titration, alkalinity or hardness <i>(List tests)</i> | | 1 – 5 |
| | • More advanced determinations such as numerous inorganics <i>(List tests)</i> | | 1 – 7 |
| | • Highly sophisticated instrumentation such as atomic absorption or gas chromatograph <i>(List tests)</i> | | 10 |

| APPLICANT VERIFICATION | | | |
|--|--|------|-------|
| I HEREBY DECLARE THAT ALL INFORMATION IN THIS APPLICATION IS TRUE. | | | |
| Name of Applicant ² : | | | |
| Title: | | | |
| Telephone: | | Fax: | |
| Signature of Authorized Representative: | | | Date: |

¹The key concept is to credit laboratory analyses done on-site by facility personnel under the direction of an operator-in-charge with points from 0-15.

²Applicant must be an authorized representative of the owner/operating authority (i.e. manager, P. Eng., or overall responsible operator).

Water Treatment Form Supplemental Information

This is supplemental information for completing the Application for Water Treatment Facility Classification Form only.

For exact definitions and text refer to Manitoba Regulation 77/2003, Water and Wastewater Facility Operators Regulation and amendment M.R. 162/2005, under The Environment Act (C.C.S.M. c E125).

A copy of the regulation is available by following the link for Manitoba Regulations at:
<http://www.gov.mb.ca/conservation/envapprovals/publs/index.html>

Facilities are classified as follows:

Small system class

A water treatment facility that otherwise meets the criteria of a class 1 water treatment facility shall be classified in the small system class if

- a) it supplies water to a population of not more than 500;
- b) its only source of untreated water is groundwater not under the influence of surface water; and
- c) the only treatment applied to the water is disinfection.

Classes 1 to 4

Water treatment facilities shall be classified in classes 1 to 4 in accordance with the following table, on the basis of the number of classification points assessed under the classification point system set out in the Water and Wastewater Facility Operators Regulation.

| <u>Range of Classification Points</u> | <u>Classification</u> |
|---------------------------------------|-----------------------|
| 0 to 30 | Class 1 |
| 31 to 55 | Class 2 |
| 56 to 75 | Class 3 |
| 76 or more | Class 4 |

Size

Points for size: (2 point minimum to 20 point maximum)

Maximum population or part served, peak day (1 point minimum to 10 point maximum). Points are assigned at 1 point per 10,000 population or part.

Design flow average day or peak month's flow average day, whichever is larger (1 point minimum to 10 point maximum). Points are assigned at 1 point per 4.5 megalitres per day or part.

Authorized Representatives

Signatures for the Applicant Verification section must be an individual recognized by the Owner of the facility as able to sign official documentation (i.e. P.Eng., Manager, CAO, etc).