



# Water Security Agency

Regional/Contract Operator Program

**February 2016**  
**EPB 286**

Two options are available that will assist in certification for smaller communities while still allowing them to meet the health and safety objectives of mandatory certification contained within *The Waterworks and Sewage Works Regulations*. This document discusses the first option, and provides a quick reference for the second.

## Option One: Regional/Contract Operator (R/C)

Obtaining the services of an R/C Operator is an option for Small System, Class I or Class II facilities. Many small communities have Class I systems or Small Systems. There are small communities, with a population of fewer than 100 people, that have Class II surface water treatment plants. The R/C Operator would be a certified operator working for a nearby community who would fit into a number of scenarios:

- be the certified operator overseeing the local uncertified operator(s);
- be the certified operator performing the work, with no local uncertified operator;
- be the certified operator working as a Relief Operator to take the place of the main operator or the operator for vacation, weekends, illness, after-hours, etc.; or
- be an Independent Regional Operator, namely, an operator without a home community acting as a certified operator for a number of communities that may or may not have their own uncertified operator on staff.

When an R/C Operator is overseeing a local uncertified operator doing the routine works, the R/C Operator might not perform the day-to-day operating tasks (including sampling) and might not be on site every day. The local uncertified operator must be able, at minimum, to perform the required operations, sampling, testing and record keeping. In case of any system problems, the local uncertified operator must be available as soon as possible and the R/C Operator must be on site within a reasonable agreed-upon time (i.e. four hours maximum) of call-out.

If there is no local uncertified operator, then the R/C Operator must do the required work and be on site as often as required to perform this work.

The R/C Relief Operator must meet certification criteria and perform job duties in a similar manner, while taking over from the regular certified operator on weekends, vacation or sick time. The working time and duties would be according to the signed agreement.

In any case, the R/C Operator and R/C Relief Operator must maintain certification, including obtaining CEUs (continuing education units) for renewal in categories and at levels that are equal to or higher than the highest facility that they are overseeing.

**Number of communities:** It is suggested the R/C Operator and R/C Relief Operator not take on more than three communities (with Small System, Class I or Class II works), in addition to their own. It is not intended this operator jeopardize the quality and completion of work at their home community, nor to provide sub-standard work to the contracted communities taken on. It is assumed the contracted communities would still have an uncertified operator on-site to do the routine, day-to-day work; however, if there is no uncertified local operator to do the routine work, this may fall to the R/C Relief Operator.

**On-site time:** It is also suggested that the R/C Operator be on site within a reasonable agreed-upon time (i.e. four hours maximum including transit time) of being called out. The R/C Operator must balance the work in the home community (or other communities) against the needs of the communities taken on. It is proposed that this person be on site at least once a week. The actual frequency of visits would depend on the particular system's operational capability/reliability and on the local uncertified operator.

**The agreement:** The R/C Operator agreement must be established between the communities on a council-to-council basis, with agreement to the terms and conditions of the contract by all parties. It is to be noted that, by regulation, the operation, maintenance and repair of a water/wastewater works must be under the direction of an appropriately certified operator at all times. This means the certified R/C Operator must ensure there is back-up coverage in case of weekend, holiday, illness or any time the R/C Operator may not be available. This may entail sub-contracting for this coverage. Possibly, the R/C Operator is one community's operator entering into an agreement with another community with the permission of the home community. The agreement participants are encouraged to obtain legal advice. A copy of the signed contract including start and finish dates and detailed duties must be submitted to the Water Security Agency (WSA) or the Ministry of Environment (MOE) for verification of regulatory compliance.

## Water Treatment/Distribution System Operator

The R/C Operator must ensure the conditions of the Operating Permit and within *The Waterworks and Sewage Works Regulations* are met at all times.

The proposed duties and responsibilities that the R/C Operator would perform or would ensure are performed as water treatment/distribution operator include, but would not be limited to, the following:

- be available by phone daily and for emergencies (24/7);
- ensure back-up is available for vacation, illness, etc.;
- be available to visit each local water utility when needed, document purpose, date/time and length of each visit, and report to affected councils;
- be on site for Environmental Project Officer (EPO) and other inspections/visits;
- if there is no local uncertified operator on staff, act as first contact from WSA if bacteriological or other water quality/quantity problems arise. The R/C Operator would aid and ensure the local operator works with council, Public Health Inspector (PHI), Medical Health Officer (MHO) or EPO;
- determine or help determine need for assistance from a PHI, EPO, consultant or contractor;
- aid in ensuring a water assurance and quality control policy is in place;
- aid in ensuring any mandated public notifications are performed;
- go on site at each local facility as necessary to ensure it meets operational, maintenance and regulatory requirements stated in *The Waterworks and Sewage Works Regulations*;
  - ensure adherence to the Operating Permit, including water quality (WQ) testing; general chemical, turbidity, health and toxicity, trihalomethane and bacteriological sampling; and/or testing and sampling;
  - WQ testing may include, but not be limited to, daily chlorine residuals, iron, manganese and fluoride levels in the water;
  - remote monitoring may be considered if the system can record/retain data and system has alarming/shutdown features for out-of-parameter situations; on-site operator to be available as soon as possible and Regional Operator to be on site within four hours maximum of the alarm;
  - perform or oversee WQ tests to confirm levels/residuals;
  - ensure the sampling sites are adequate and give representative samples;
  - ensure all sampling and testing is done in an approved manner;
  - review written facility operational records/logs for efficient operations and/or improvements such as:

- o volumes of water produced/pumped;
- o pump run times noted;
- o chlorine residuals;
- o iron/manganese/fluoride/turbidity levels;
- o bacteriological samples submitted/results received/follow-up actions taken;
- o review dilution/dosage calculations;
- o feed barrels refilled date;
- o feed pump cleaning, maintenance, calibration;
- o filter backwash and time noted;
- o stand-by engine checked/tested;
- o unusual or abnormal conditions observed and action taken;
- o any equipment taken out of service or ceased to function and action taken;
- o any equipment placed back into service; and
- o access to confined space and other situation safety equipment;
- review manuals, inventory and spare parts;
- ensure mains, reservoir(s) and/or clearwell(s) are on a routine cleaning schedule;
- ensure operational, maintenance and repair manuals are available and up-to-date for facility equipment, machinery, test equipment, alarm systems, etc.;
- ensure equipment and machinery is on a monitoring and maintenance schedule;
- ensure emergency response plan, including spill reporting/documentation is available and up-to-date;
- ensure supplies are on hand (such as chemicals, test reagents, bacti bottles, spare parts, etc.);
- review facility operation and ensure efficient operation;
- provide operational advice or seek professional help/advice from consultant or contractor;
- may provide input to an operational waterworks/distribution system budget;
- develop operator training plan;
- ensure working environment is safe and follow all Occupational Health and Safety standards and practices;
- answer water quality questions and issues from local citizens;
- exercise valves/hydrants;
- maintain, test and read customer and other meters; and
- report on the above matters to the work's owner.

## **Wastewater Treatment and/or Wastewater Collection Operator**

On the wastewater side, the operator could be certified as Class I or Class II, depending on the size of the community and complexity of the system. If the community has a population of fewer than 500 people and has a Class I wastewater treatment system (i.e. facultative lagoons) and/or a Class I collection system, then the operator could be certified as a Small Wastewater System operator. The R/C Operator must ensure the conditions of the permit for the sewage works and within *The Waterworks and Sewage Works Regulations* are met at all times.

The proposed duties/responsibilities of this wastewater treatment operator would include, but not be limited to, the following:

- be available by phone daily and for emergencies (24/7);
- ensure back-up for vacation, illness, etc.;
- be available to visit each local water utility when needed;
- document purpose, date/time and length of each visit and report to affected councils;
- be on site for EPO and other inspections and visits;
- act as first contact from WSA or MOE if wastewater quality/quantity problems arise (if there is no local uncertified operator on staff to be the first contact) and ensure contract/local operator works with council, PHI, MHO or EPO;
- determine or help determine need for assistance from a PHI, EPO, consultant or contractor;
- go on site at each local facility as necessary to meet operational, maintenance and regulatory requirements stated in *The Waterworks and Sewage Works Regulations* to
  - confirm adherence to permit for sewage works;
  - confirm samples are collected and sent as stated in the permit in a safe, timely manner from a location giving a representative sample;
- perform or oversee lagoon discharge, sampling, and spring and fall equalization;
- review written facility operational records and logs for efficient operations and/or improvements:
  - volumes of wastewater pumped and discharged;
  - note freeboard before and after discharge;
  - pump run times noted;
  - pump cleaning and maintenance;
  - ventilation system cleaning and maintenance;
  - unusual or abnormal conditions observed and action taken;
  - any equipment taken out of service or ceased to function and action taken;
  - any equipment placed back into service;
  - access to confined space and other situation safety equipment;
- review manuals, inventory and spare parts;
- ensure operational, maintenance and repair manuals are available and up-to-date for facility equipment, machinery, test equipment, alarm systems, etc.;
- ensure equipment and machinery are on a monitoring and maintenance schedule;
- remote monitoring may be considered if the system can record and retain data and system has alarming/shutdown features for out-of-parameter situations; onsite operator to be available as soon as possible and R/C Operator to be on site within four hours maximum of the alarm;
- ensure emergency response plan, including spill reporting and documentation is available and up-to-date;
- review facility operation and ensure efficient operation;
- provide operational advice or seek professional help and advice from consultant or contractor;
- may provide input to an operational wastewater works and collection system budget;
- develop an operator training plan;
- ensure working environment is safe and follow all Occupational Health and Safety standards and practices;

- answer wastewater quality questions and other issues from local citizens;
- exercise valves;
- maintain, test, and read any meters; and
- report on the above matters to the work's owner.

The duties, responsibilities, transit and on-site times and frequency of visits of the R/C Operator must be stated in the agreement. Likely, the duties and responsibilities would be the same as if this person was the real operator in charge of the facility and supervising an uncertified co-worker. Liability issues would also be addressed in the agreement and would be similar to the liability of an operator in charge and working directly for the municipality. Insurers have indicated an R/C Operator would be satisfactory in terms of meeting the regulatory requirement to obtain liability insurance.

## Independent Regional/Contract Operator

An alternative concept is one of an Independent R/C Operator who does not have a home facility and is to be an R/C Operator or R/C Relief Operator. This operator must be certified at the highest level of the facilities being overseen and, likely, the contracted communities would have an uncertified worker performing day-to-day work at the facility and in the community. The Independent R/C Operator would only perform work as contracted in relation to the water treatment plant, the distribution system, the collection system and the wastewater treatment system.

The following is for consideration:

- being not necessarily tied to a particular facility or community, means the operator has more time to go to the contracted communities and could have more facilities (i.e. eight) under supervision. The operator could potentially visit one facility per day (four per week, allowing one day per week office time), visit the waterworks, review the operation and perform duplicate water quality tests with the on-site operator. Each facility would be visited every two weeks on a regular basis.
- it is suggested this operator should be on site within a reasonable agreed-upon time of the call (i.e. four hours maximum).
- the duties and responsibilities of the operator would be as previously indicated or as agreed upon by the community and the particular Regional Operator.

The guiding principle is the Independent R/C Operator or Independent R/C /Relief Operator must do whatever is required to ensure all the conditions stated in the permit of the specific works and the regulations are met at all times.

## Option Two: Small Systems Certification

Should a community choose to certify its own operator, it could consider a Small System alternative. This system is one where the water treatment plant is classified as Class I with ground water treatment serving fewer than 500 people, and/or its distribution system is Class I serving fewer than 500 people. Also, a Small Wastewater System is one where the wastewater treatment facility is classified as Class I with a lagoon system (no mechanical treatment) serving fewer than 500 people, and/or its sewage collection system is Class I serving fewer than 500 people.

Certification criteria are listed in Section 2.1 and 3.1 of the *Saskatchewan Water and Wastewater Works Operator Certification Standards*, December 2016, EPB 539.

See next page for sample agreement.

## Water/Wastewater Facility Operations Agreement

This Agreement made this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

Between:

THE VILLAGE OF \_\_\_\_\_  
(hereinafter called the Village)

and

\_\_\_\_\_  
(hereinafter called the Operator)

WHEREAS the Village is the owner of a water treatment facility located at the intersection of \_\_\_\_\_ Street and \_\_\_\_\_ Street and the water distribution system (hereinafter referred to as the facility) located within the corporate limits of the Village;

AND WHEREAS the operator is regularly employed by a third party outside the Village of \_\_\_\_\_;

AND WHEREAS the Operator is certified as a Water Treatment, Class\_\_ and as a Water Distribution, Class\_\_ operator;

AND WHEREAS the Village is desirous of utilizing the services of the Operator for the operation of the Village facility;

AND WHEREAS the Village and Operator are desirous of entering into an agreement dealing with the use of the Operator on terms and conditions set out herein;

NOW THEREFORE this Agreement witnesseth that, in consideration of the mutual covenants, terms and conditions herein contained, the parties hereto agree as follows:

1. That the Operator agrees to carry out the duties/responsibilities as set by the Village.
2. That the Village assumes all responsibility for the Operator's actions, performances, or negligence in the operation of the facility, and relieves the Operator's employer of all responsibility for the Operator's actions, performance, or negligence in the operation of the facility or in carrying out any duties for the Village under this agreement.
3. That the Operator and the Village agree that the duties/responsibilities outlined in Schedule A shall not significantly interfere with the Operator's regular employment outside the Village. The time commitment required for the work described in Schedule A will be supplemental to the Operator's regular employment outside the Village.
4. That the Operator's employer agrees to allow the Operator the required time off from his regular employment to be in attendance at the Village facility for emergency situations and for inspections of the facility by the Water Security Agency.
5. That the Village agrees to pay a monthly wage to the Operator at a rate that is mutually agreed upon for the duties/responsibilities as set by the Village. The wage will be reviewed by both parties at the first council meeting of the Village in January of each year.
6. That the Operator agrees to maintain certification as a Water Treatment, Class\_\_ and as a Water Distribution, Class\_\_ operator with the Saskatchewan Operator Certification Board.
7. That the Village, if required, would be willing to reimburse the Operator's employer a portion of the costs associated with future training for certification renewal and/or upgrades of the Operator.

8. That the Operator agrees to oversee the work performed by an uncertified operator.
9. That the Operator agrees to the collection of all water quality data as per the Water Security Agency's regulations, permits and guidelines.
10. That the Operator agrees to attend a Village Council meeting every third month commencing with January of each year to keep Council informed on the operation of the facility.
11. That the Operator or the uncertified operator, in an emergency situation, has the authority to obtain assistance of any other licensed personnel to correct a problem at the facility.
12. That the Village agrees to include the Operator under their insurance policy with respect to water treatment and distribution services.
13. That the Village, Operator's employer and the Operator agree that no modification, variation, amendment or termination by mutual consent of this Agreement shall be effective unless in writing and executed by all parties hereto.
14. That the Village, the Operator's employer, or the Operator may terminate this Agreement at any time by giving the other parties sixty (60) days notice in writing.
15. That this agreement, including Schedule A hereto, embodies the entire Agreement of the parties hereto with regard to the subject matter hereof and no understanding or agreements, verbal or otherwise, exist between the parties except as herein expressly set out.
16. That this agreement shall inure to the benefit of and be binding on the parties and their heirs, successors, executors, administrators and assigns.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first above written.

SIGNED, SEALED AND DELIVERED

IN THE PRESENCE OF:

Dated this            day of            20\_\_\_\_

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Operator's Employer  
Village of \_\_\_\_\_

Dated this            day of            20\_\_\_\_

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Operator  
  
Village of \_\_\_\_\_  
  
\_\_\_\_\_  
Clerk/Administrator  
  
\_\_\_\_\_  
Mayor