

**Summary of North Battleford Commission of Inquiry  
Recommendations, Actions and Status of Implementation  
(March 2009)**

Commission Recommendations	Government Action Taken	Status
1. That the criteria for surface water treatment plants reporting to SERM be standardized for the province, and not different between EcoRegions.	Section 39 (testing and reporting) and 42 (operational records and logs) was added to The Water Regulations – requirement for standardized reporting, monitoring and testing. Saskatchewan Ministry of Environment also standardized its own inspection, permitting and record keeping protocols for use across regions and the province.	<u>Complete</u> , effective following passage of regulation in December 2002.
2. That the City of North Battleford commence construction for a new sewage treatment plant at a location downstream from the surface water treatment plant by no later than the spring of 2003.	Ministry worked with city and Engineering Consultant to assess project requirements. Significant financial support for the construction of the new sewage works was provided through the Canada-Saskatchewan Infrastructure Program	A new wastewater treatment plant is operational effective October 2005. <u>Complete</u> .
3. Each permit to operate a surface water treatment plant should require as a condition to operate that there exist a quality control/quality assurance written policy in place that is acceptable to the regulator.	Subsection 43(1) of The Water Regulations – requirement that all communities have a QA/QC policy. This became a provision of regulations in December, 2002 and took effect on December 31, 2003.	Requirement for QA/QC policy completed by means of revised regulation as of December 31, 2003. Included as new permits are issued or renewed. Guidelines and template developed and distributed. <u>Compliance over 97.5 per cent</u> for permitted waterworks. Compliance activities ongoing.
4. That each permit to operate a surface water treatment plant specify as a condition for operation the record system that shall be maintained within the plant, and also specify a monthly internal review process to ensure that operating parameters within the permit are consistently being met.	<ul style="list-style-type: none"> <li>• Subsection 43(2) of The Water Regulations – requirement that permittee review records and logs pursuant to section 42 on a monthly basis.</li> <li>• Ministry's new operating permit template developed and used for all waterworks includes record keeping and monthly review requirements.</li> </ul>	Requirement for monthly record review completed by means of revised regulation effective December 31, 2003. Included in permits as new permits are issued. Guidelines developed and distributed to aid in owner compliance. <u>Very high rate of compliance</u> . Checked at each inspection. Compliance and inspection activities ongoing.
5. That the City of North Battleford prepare a written safe drinking water policy that commits to the principle of quality of water over quantity of water, that commits to maintaining best industry practices in its water treatment plants, and that encourages the manager of the water treatment plant to report directly to city council whenever he has concerns that affect the safety of drinking water which are not being addressed by city administration officials.	North Battleford has provided Saskatchewan Ministry of Environment with a copy of the safe drinking water policy. Complete. A safe drinking water policy statement has been included in Quality Assurance/Quality Control templates developed by Saskatchewan Ministry of Environment for community and waterworks owner use.	Safe Drinking Water Policy has been prepared and submitted to City Council and was adopted by City Council on July 15, 2002. <u>Complete</u> .
6. That one of the committees of City Council be assigned responsibility for implementing the city's safe drinking water policy.	Not directly applicable throughout Saskatchewan, although Saskatchewan Ministry of Environment is following up on this recommendation.	City Committee has assigned the Public Works Committee this responsibility – <u>Complete</u> .
7. That this committee receive from the manager of the water treatment plant a written report quarterly on the operations of the water treatment plant during the previous three months. Said report should include the results of all sampling conducted during the period, any non-compliances with the operating permit, and any other types of problem that an oversight committee would be interested in hearing.	Not directly applicable throughout Saskatchewan, although Saskatchewan Ministry of Environment is following up on this recommendation. Ministry presently gets monthly reporting on operation of the surface water treatment plant.	Director of engineering reviews water data monthly and Manager provides a report to Council drinking water committee quarterly. <u>Complete</u> .

Commission Recommendations	Government Action Taken	Status
8. That the subcommittee of Council prepare a report annually for City Council on the state of drinking water in the city, which report shall be part of the public record.	Not directly applicable throughout Saskatchewan, although the Ministry is following up. Saskatchewan Ministry of Environment regulations now state that all communities notify consumers served on water quality and sample submission compliance annually.	<u>Completed</u> by North Battleford in spring 2004 for 2003, and in spring 2003 for previous year. <u>Ongoing</u> . In 2008-09, 653 waterworks owners completed consumer reporting. Follow-up planned to attain full compliance.
9. That the City of North Battleford raise its water utility rates at least to the median level of the rates charged by the thirteen Saskatchewan cities.	Not directly applicable to Saskatchewan, although Saskatchewan Ministry of Environment is tracking this recommendation.	Rates have been raised and flat fees for water/ sewer infrastructure have been added. As of March 2003, water rates are above median levels. <u>Complete</u>
10. That in the future the performance requirements expected of a surface water treatment plant be itemized in its permit to operate, and include not only the parameters to be met, but also the quality assurance and quality control procedures that are to be in place.	Saskatchewan Ministry of Environment developed a new operating permit template that includes these elements. Also see subsection 43(1) of The Water Regulations – requirement that all communities have a QA/QC program.	Permitting performance and QA/QC requirements included in all new and renewed permits. <u>Complete and ongoing</u> .
11. To better ensure that surface water treatment plants remain capable in both infrastructure and operations year after year, that they be inspected by the regulator at least biannually by a person knowledgeable in surface water treatment best industry practices. This inspection should include: a record review to determine the level of compliance with the parameters for performance and sampling requirements set out in the permit; a review of the plant's processes and their operational effectiveness; an interview with the Manager; and an interview with at least one operator. (a) That a detailed inspection report be produced that records any non-compliance with permit requirements, recommends any improvements to be made and a timetable for the same and offers an overall grading of where the plant fits in the spectrum of quality for surface water treatment plants. (b) That a copy of the inspection report be delivered to the Manager of the plant, to the city commissioner or his or her equivalent, and to the Medical Health Officer for the health district.	Currently in place based on Safe Drinking Water Strategy – funding for inspection staff provided in 2002/03, 2003/04, 2004/05, 2005/06, 2006-07 and 2007-08 budgets. Present inspection frequency is 2 times per year for surface water plants, groundwater plants serving population of greater than 500 and small groundwater treatment plants that represent an elevated risk. One inspection per year at all other waterworks and sewage works. Staff training protocol completed and staff refresher training in waterworks technical operations and compliance/enforcement was complete by mid-December 2002. Inspection protocol developed and calls for delivery of copy of inspection report to listed parties. Waterworks safety assessment protocol/methodology developed and implemented to allow Saskatchewan Ministry of Environment to provide overall ranking of waterworks.	Inspection protocol, which addresses all these issues and recommendations, was developed, completed and implemented by Saskatchewan Ministry of Environment. Non-compliance is documented on inspection forms, timetables are established for compliance and facilities are rated in overall terms using a separate protocol. Copies of inspection forms are provided to Health Regions (MHOs or PHIs) and are available to the public on SaskH2O website. <u>Complete and ongoing</u> .
12. That the City of North Battleford in the next six months: (a) install a supervisory control and data acquisition system (SCADA) in the surface water treatment plant; (b) retain a management consultant to assess the adequacy of the management component and the operator component of the plants department and to report within a further two months. It is recommended the report produced be tabled at City Council as a public document, and a copy provided to SERM; and (c) commission an engineering study to determine if the city's reservoir capacity is adequate, bearing in mind the desirable goal of not operating the surface water treatment plant for short periods of time only.	Not directly applicable throughout Saskatchewan, although the Saskatchewan Ministry of Environment is tracking this recommendation.	(a) City-wide SCADA installed. <u>Complete</u> .  (b) <u>Complete</u> . City has hired an Instrumentation technician, and another foreman as a result of report. Succession plan for operators in place.  (c) A written detailed engineering study of reservoir capacity is now <u>complete</u> .

Commission Recommendations	Government Action Taken	Status
<p>13. That the Government of Saskatchewan approve SERM's request to fund an integrated provincial water quality database in the fiscal year 2002-03.</p>	<p>Based on the Safe Drinking Water Strategy – funding provided in 2002/03, 2003/04, 2004/05, 2005/06, 2006-07 and 2007-08. Covers drinking water portion of data system.</p>	<p>Drinking Water portion on line June 2003. Sewage works module expected in fall 2009, remote inspection data collection completed and implemented in 2008-09 and implemented. Additional reporting modules for drinking water being developed. <u>Complete and ongoing.</u></p>
<p>14. That the new data system incorporate the permit requirements for each licensee with a flagging system to identify communities that have not submitted the required samples and produce a printout on a weekly basis of all such non-compliances.</p> <p>That all non-compliances be followed up, within seven days, with the Chief Municipal Administrator or his or her designate, who may not be the Manager or other person operating the water treatment facility.</p> <p>That with respect to a missed bacteriological sample, the municipality be advised to submit one within seven days. In the event the municipality fails to do so a Precautionary Drinking Water Advisory (PDWA) be issued.</p>	<p>Based on the Safe Drinking Water Strategy – funding for drinking water project component provided in 2002/03, 2003/04, 2004/05 and 2005/06 budget. Until computer system is fully operational, compliance tracking is manual (daily for bacteriological sample result tracking and quarterly for other parameters).</p>	<p>Manual tracking, notification and follow-up protocol completed and currently in place.</p> <p>Saskatchewan Ministry of Environment's computer system has capability to meet requirement. As of March 31, 2009 electronic bacteriological data transfer from the Provincial Laboratories as a means to more fully automate notification of Saskatchewan Ministry of Environment regulated waterworks and bacteriological data is now operational. The Saskatchewan Disease Control Laboratory (formerly Provincial Laboratory) is working to develop similar procedures for other water testing parameters. Other laboratories have capability at present.</p> <p>Using manual methods, the Saskatchewan Ministry of Environment presently notifies municipalities of needs to resubmit missing samples or advisory may be issued. Environment is investigating ways in which notices of non-compliance can be transferred more directly by email to owners of regulated waterworks and has made progress in this regard.</p>
<p>15. That in the event of persistent non-compliance by a municipality with respect to bacteriological sampling requirements, the regulator should appoint new management (see page 288), or should rescind the permit to operate the facility.</p>	<p>Sections 30, 31 and 32 of The Environmental Management and Protection Act (2002) now provide the Minister with authority to take action necessary with respect to water and sewage works to protect human health.</p>	<p><u>Completed</u> and implemented as required with October 1, 2002 proclamation of EMPA (2002).</p>
<p>16. That a provincial protocol for water-borne disease investigation be prepared, distributed, and adopted by all health districts in the province and that this protocol include:</p> <p>(a) the establishment of a task force in each district which is to be notified by the medical health officer, or in his/her absence a public health inspector, whenever the health district is experiencing an enteric disease outbreak that could be caused by a water-borne pathogen;</p> <p>(b) that this protocol emphasize that the first hypothesis to be tested is whether or not it could be a water-borne pathogen, which means automatically checking with personnel at the water treatment facilities and with the regulator who should have a member on the task force;</p>	<p>The Communicable Disease Control Manual used by the health regions has been revised to address (a)(b)(c) and (e) of this recommendation.</p>	<p>Revisions sent to the Health Regions in February 2003.</p> <p>16(a) and (b) <u>complete</u> and sent to Health Regions in May 2003.</p>

Commission Recommendations	Government Action Taken	Status
<p>(c) when cases appear which are geographically close to a regional centre such as North Battleford that any additional persons or family members identified by the confirmed case who have also experienced a similar illness be interviewed in detail as to when and where they have consumed water for the period of at least ten days before the onset of illness;</p> <p>(d) that if the enteric disease reporting form is to continue to be used as a routine form, a new, much more detailed, form be available for use by investigators when-ever the investigation involves a possible outbreak of water-borne disease; and</p> <p>(e) when in any health district there is a difference of opinion or uncertainty based on the available evidence as to whether or not a PDWA or boil water order should be issued after consultation with the task force, the Medical Health Officer should contact forthwith the provincial Public Health Officer or Deputy Minister to seek advice.</p>	<p>16(d) complete.</p>	<p>16(c) <u>complete</u>.</p> <p>16(d) <u>complete</u>.</p> <p>16(e) <u>complete</u>.</p>
<p>17. That each health district establish sentinel pharmacies to report any increase in anti-diarrheal medications. This is recommended by the Centres for Disease Control and Prevention in Atlanta, Georgia, and seems necessary when so many patients experiencing enteric disease self-medicate. This alert can also result in a request to physicians to increase stool sampling.</p>	<p>Saskatchewan Health and Health Region Medical Health Officers have discussed the effectiveness of establishing sentinel pharmacies that will be used in surveillance of water borne illness in the province. It is felt that a more effective alternative is for the Medical Health Officers to communicate with local pharmacists when investigating possible outbreaks that may be associated with water.</p>	<p>Saskatchewan Health's Chief Medical Health Officer has written to the Saskatchewan Pharmaceutical Association asking them to request Saskatchewan pharmacists to notify the local Medical Health Officer of any unusual increase of purchases of anti-diarrheal medications. The letter also indicated that local Medical Health Officers may contact pharmacists when investigating water borne illness outbreaks to obtain this type of information. This activity was <u>completed</u> in 2003-04.</p>
<p>18. That a provincial protocol be developed for use by all health districts as to when stool samples should be requested from a patient and forwarded to a laboratory. The inquiry did not hear enough medical evidence to determine what such protocol should be, but clearly in this case there were not enough stool samples taken and the ability to diagnose disease was hampered.</p>	<p>The Communicable Disease Control Manual used by the Health Regions has been revised.</p>	<p>Revisions sent to the health regions in February 2003. <u>Complete</u></p>
<p>19. That the provincial Department of Health prepare for distribution to all health districts, guidelines including sample documents where appropriate, for all action to be taken by a health district once a PDWA or a boil water order is issued. The guidelines should cover the points outlined in the memorandum dated October 2, 2000 prepared by the public health inspectors. (See page 190).</p>	<p>A Saskatchewan Health, Health Region and Saskatchewan Ministry of Environment committee developed procedures/guidelines to address this recommendation. These procedures/guidelines were included in the Bacteriological Follow-up Protocol for Waterworks Regulated by Saskatchewan Ministry of Environment.</p>	<p>This work was <u>completed</u> in the 2003-04 fiscal year.</p>
<p>20. That each health district put in place a system that requires:</p> <p>(a) that all reports from laboratories identifying enteric disease be reviewed daily between Monday and Friday, whether the communicable disease coordinator is present at work or not;</p> <p>(b) that instances of enteric disease be recorded in the</p>	<p>The Communicable Disease Control Manual used by the Health Regions has been revised. Saskatchewan Health has also written the regions on specific items.</p>	<p><u>Completed</u> in February 2003.</p>

Commission Recommendations	Government Action Taken	Status
<p>communicable diseases log on the date the result is submitted, not the date a person recorded it;</p> <p>(c) that one public health inspector assume the primary role for investigating enteric disease, with a designated alternate for when the primary investigator is not available;</p> <p>(d) that the primary and alternate investigator receive training additional to other public health inspectors in the investigation of enteric disease, and in particular in interviewing techniques; and</p> <p>(e) that each district establish a contingency plan that will mobilize a number of additional persons to the investigation team in the event of an outbreak. The logical persons to be so added would be public health nurses who also have some training in interviewing techniques.</p>		
<p>21. That public health officers for the health districts be briefed annually by a SERM representative for the purpose of learning the state of water treatment systems in the district, and what the potential may be for problems that might lead to disease.</p>	<p>Internal protocol developed. Formal briefings for Health Region officials planned and conducted each year.</p>	<p>PHIs or MHOs sent copies of inspection reports. Environment region staff meeting with Health Region colleagues. Bacteriological Follow-up Protocol developed and a focal point of the working relationship. Briefings performed during 2003-04 and previously. <u>Completed and ongoing.</u></p>
<p>22. That the provincial government take steps to ensure a better supply of public health inspectors in the province of Saskatchewan. These steps should include either greater educational opportunity for persons wishing to become public health inspectors to be educated in the province, or financial assistance for those persons who must leave the province to obtain the appropriate education.</p>	<ul style="list-style-type: none"> <li>• A new contract between SAHO and the Health Science Association has provided additional compensation for public health inspectors, which has assisted in recruitment and retention.</li> <li>• Saskatchewan Health provides bursaries to students interested in becoming a public health inspector.</li> <li>• Saskatchewan Health and Saskatchewan Learning are helping First Nations University of Canada (FNUC) promote FNUC's Environmental Health Sciences Degree Program. Graduates from this program are eligible to sit a national examination qualifying them to work as a public health inspector.</li> </ul>	<p>Saskatchewan Health continues to offer four to six bursaries to students interested in becoming a public health inspector. <u>Ongoing</u></p>
<p>23. That in the future, if SERM wishes to bring to the attention of operators information it considers important, it do so by letter or bulletin, stating the information and why it is important.</p>	<p>Binder containing all revised legislation, fact sheeting, and important operational information prepared and printed. Material also posted on SaskH2O.ca website. Bulletins and direct delivery of new and updated information will be used in the future. Saskatchewan Ministry of Environment also uses direct letters to regulated parties.</p>	<p>Binder delivered to each waterworks commenced March 2003 and completed during the fiscal year. <u>Complete and regular updates ongoing.</u></p>
<p>24. That the government amend the operator certification regulations to provide that, after the first renewal, each operator must take a certain number of continuing education credits to qualify for the second renewal, and each renewal thereafter.</p>	<p>Section 68 of The Water Regulations now in place and imposes a requirement to obtain continued education before certification renewal period.</p>	<p>Regulations in place and take effect for continuing operator education July 15th, 2005. Those operators re-certifying post-July 2005 must start to obtain renewal credits (Continuing Education Units) beginning July 15, 2003. There were 1374 certified operators as of March 31, 2009. <u>Requirements complete. Tracking of compliance ongoing.</u></p>
<p>25. That the government ensure there are sufficient continuing education courses available to meet the needs of operator</p>	<p>Currently in place based on Safe Drinking Water Strategy</p>	<p><u>Implemented and ongoing.</u></p>

Commission Recommendations	Government Action Taken	Status
continuing education.		
<p>26. That EMPA be amended to:</p> <p>(a) establish a separate drinking water quality unit in SERM, whether it is called a branch, a directorate, or a section, with its own "director";</p> <p>(b) provide the unit with all of the jurisdiction EMPA currently provides SERM over waterworks and, in addition, provide the unit with a mandate and jurisdiction to protect watershed and ground water sources of drinking water;</p> <p>(c) provide that within the unit there exist a separate compliance section; and</p> <p>(d) provide that the unit produce an annual report to the legislature on the state of drinking water quality in the province.</p>	<p>(a) Drinking Water Quality Section formed under Saskatchewan Ministry of Environment</p> <p>(b) Saskatchewan Ministry of Environment's Drinking Water Quality Section and Regional Operations have EMPA and regulatory jurisdiction over waterworks and sewage works. Construction approval process transferred from The SaskWater Act to The Environmental Management and Protection Act (2002). The Saskatchewan Watershed Authority was created under the mandate of Saskatchewan Ministry of Environment by proclamation of the Saskatchewan Watershed Authority Act on October 1, 2002, with a mandate for source water protection including protecting the supply and quality of surface and ground water. The Saskatchewan Watershed Authority reports to the Deputy Minister of Environment and works in a closely integrated fashion with Saskatchewan Ministry of Environment</p> <p>(c) Enforcement officer position staffed and separate compliance and enforcement section formed during 2002</p> <p>(d) Section 19 of The Environmental Management and Protection Act (2002) – requires annual reporting to the Legislative Assembly.</p>	<p>(a) <u>Implemented</u> July 2002.</p> <p>(b) <u>Implemented</u> effective October 1, 2002.</p> <p>(c) <u>Implemented</u> Fall 2002. However, enforcement officer reports through Compliance and Field Services effective April 2004.</p> <p>(d) Requirement now legislated, reports published in July 2003, 2004 and 2005. <u>Complete and ongoing.</u></p>
<p>27. That the regulator pursue a comprehensive inspection policy of water treatment facilities and apply a rigorous abatement-enforcement compliance policy on all water treatment facilities.</p>	<p>Currently in place based on Safe Drinking Water Strategy, Inspection Protocol developed and formal Compliance and Enforcement Protocol developed.</p>	<p>Inspection protocol implemented and ongoing. Compliance and enforcement protocol <u>implemented and ongoing.</u></p>
<p>28. That The Water Pollution Control and Waterworks Regulations be amended:</p> <p>(a) to provide that in the event of persistent non-compliance by a municipality, the regulator may order the replacement of the existing management or operators and may temporarily hire replacements as required at the municipality's expense; and</p> <p>(b) to make it an offence to knowingly operate a water treatment facility in contravention of the operational requirements set out in the operating permit.</p>	<p>Sections 30, 31 and 32 of The Environmental Management and Protection Act (2002) – provides the Minister with authority to take recommended actions and others necessary with respect to water and sewage works to protect human health.</p>	<p>(a) <u>Implemented</u> as a component of EMPA (2002) rather than revisions to the regulations.</p> <p>(b) <u>Implemented</u> as a component of EMPA (2002) rather than revisions to the regulations.</p>