

**2014 WATERWORKS
INFORMATION FOR
PUBLIC VIEWING FOR THE
CONSUMERS OF THE
VILLAGE OF DYSART**

Dysart Waterworks Newsletter

July 2015

Water Customers:

The Saskatchewan Water Security Agency requires that once per year water works owners provide a notification to customers regarding the quality of water produced and supplied. Also required performance of the waterworks in submitting samples as required by the Minister's order.

A daily test of chlorine residual is done and the water supply, (365 chlorine test were done in 2014). All of them met the requirements by Sask environment. A daily test is also done for turbidity in the water. Turbidity is the amount of suspended solids, or the cloudiness of the water. Each test done in 2014 was within the parameters of the requirements.

A bacteriological sample is also required to be sent into the provincial Lab in Regina. We sent in 47 of the the required twenty five (25) samples in 2014. One sample tested positive negative for harmful bacteria, this sample was collected after a waterline replacement, there was a boil water advisory in effect and stayed in effect until the next test came back negative.

Chemical Health

All waterworks serving less than 5000 people are required to submit water samples to the Provincial Lab, Saskatchewan Environment Chemical Health Category every two (2) years, samples, which include analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, tellurium and uranium. The last sample for chemical health analysis was submitted February 13, 2013. Sample results indicated that the provincial drinking water quality standards were not exceeded. The next test is scheduled for 2015.

The Councilor in charge of waterworks is Randy Christie. It is his duties to ensure that I as a waterworks operator am following the regulations of Sask Environment, such as daily book keeping, correct water sampling, keeping the waterworks tidy and clean, providing safe potable drinking water to our customers with minimal interruptions in service.

Don Turner, our Environmental Projects Officer inspected the north well, lagoon, and water treatment plant. The Village of Dysart is complying with the rules and guidelines of Saskatchewan Water Security Agency.

For more information on water quality and sample submitting, contact the Village Office at 432 – 2100 or write to;

Village of Dysart
Box 70
Dysart, SK.
S0G 1H0
dysartsk@sasktel.net

Other question or concerns, contact;

Project Officer
Don Turner
420 – 2365 Albert Street
Regina, SK
S4P 4K1
Phone: (306)787-6199
Cell: (306)539-4188
don.turner@wsask.ca

Waterworks Operator
Maintenance Foreman
Dana Graff
Cell: (306)331-7021

Waterworks Councilor
Randy Christie
Home: (306)432-2281
Cell: (306)331-6902

Thank you,

Dana Graff
Maintenance Foreman
Waterworks Operator



Drinking Water Quality and Compliance

Town Short Form – A Template for Annual Notice to Consumers

(Note: This short form may be used for communities or waterworks serving a population of less than 5000).

Introduction

Saskatchewan Ministry of Environment requires that at least once each year waterworks owners provide notification to consumers of the quality of water produced and supplied as well as information on the performance of the waterworks in submitting samples as required by a Minister's Order or Permit to Operate a waterworks. The following is a summary of the Village of Dysart water quality and sample submission compliance record for the January 1, to December 31, 2014 time period. This report was completed on July 22, 2015. Readers should refer to Environment's Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 202 for more information on minimum sample submission requirements and the meaning of type of sample. Permit requirements for a specific waterworks may require more sampling than outlined in the department's monitoring guidelines. If consumers need more information on the nature and significance of specific water tests, for example, "what is the significance of Selenium in a water supply", more detailed information is available from: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index_e.html.

Water Quality Standards

Bacteriological Quality

Parameter/Location	Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Submitted (%)
Total Coliform and Background Bacteria	0 Organisms/100 mL Less than 200/100 mL	25/year	47	1

Water Disinfection –

Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.31 – 1.45	.20 - 1.09	25	47	

Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Waterworks Records-From Water Treatment Plant Records

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements
Free Chlorine Residual	at least 0.1	.27 - 1.72	365	0

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Tests are normally performed on a daily basis by the waterworks operator and are to be recorded in operation records. This data includes the number of free chlorine residual tests performed, the overall range of free chlorine residual (highest and lowest recorded values) and the number of tests and percentage of results not meeting the minimum requirement of 0.1 mg/L free chlorine residual.

Turbidity – From Water Treatment Plant Records

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity	1.0	.08 - .28	0	.28	365	365

Chemical – Health Category

All waterworks serving less than 5000 persons are required to submit water samples for SE's Chemical Health category once every 2 years. The Chemical Health category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium.

The last sample for Chemical Health analysis was submitted in 2013. Sample results indicated that the provincial drinking water quality standards were not exceeded. Samples exceeded provincial water quality standards for the following parameters:

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Result(s)	# Samples Exceeding Limit	
Arsenic	0.025		5.7	0	* Results expressed as average values for communities or waterworks that fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.
Barium	1.0		92.4	0	
Boron		5.0	<0.1	0	
Cadmium	0.005		<0.56	0	
Chromium	0.05		<0.11	0	
Fluoride (avg*)	1.5		0.12	0	
Lead	0.01		.20	0	
Nitrate (avg.*)	45.0		.5	0	
Selenium	0.01		<0.96	0	
Uranium	0.02		2.9	0	

Chemical – Trihalomethanes (THMs)

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1		4 (1 every 3 months)	

Note: Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for THMs. Waterworks using groundwater sources beyond the influence of surface water do not need to report THMs since sampling/analysis will not likely have been performed.

General Chemical

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	206	1	1
Bicarbonate	No Objective	251	1	1
Calcium	No Objective	70	1	1
Carbonate	No Objective	0	1	1
Chloride	250	4.2	1	1
Conductivity	No Objective	471	1	1
Hardness	800	253	1	1
Magnesium	200	19	1	1
PH	No Objective	8	1	1
Sodium	300	6	1	1
Sulphate	500	45.6	1	1
Total dissolved Solids	1500	399	1	1

All waterworks serving less than 5000 persons are required to submit water samples for SE's General Chemical category once every two years if a ground water source and once per three months every second year if a surface water or blended surface/groundwater source. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, carbonate, chloride, conductivity, hardness (as CaCO₃), magnesium, sodium, sulphate and total dissolved solids.

The last sample for General Chemical analysis was required in 2013 and submitted on February 13, 2013. Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical category.

*Objectives apply to certain characteristics of or substances found in water for human consumptive or hygienic use. The presence of these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying good quality water. Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazards. The aesthetic objectives for several parameters (including hardness as CaCO₃, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.

More information on water quality and sample submission performance may be obtained from:

Village of Dysart
Box 70, Dysart, SK, S0G 1H0
306-432-2100 / 306-432-2265
dysartsk@sasktel.net

BYLAW NO. 04/12

A BYLAW OF THE VILLAGE OF DYSART TO FIX THE RATES TO BE CHARGED FOR THE USE AND CONSUMPTION OF WATER AND TO FIX THE RATES TO BE CHARGED BY WAY OF RENT OR SERVICE CHARGE FOR THE USE OF SEWER

COUNCIL of the Village of Dysart, in the Province of Saskatchewan, enacts as follows:

1. The charges to be paid by the water consumer whose water service has been turned on shall be those set out in Schedule "A" attached; provided, however, that the minimum shall be payable in every case whether or not any water is consumed.
2. Persons who own or occupy premises drained or that are by bylaw required to be drained into the sewer shall pay for such services a rental rate or service charge in accordance with Schedule "B" attached.
3. Every customer shall pay a water and sewer infrastructure fee as set forth in Schedule "C" attached hereto.
4. Accounts for water service and/or sewer service shall cover a period of three successive months, and shall be rendered on or before the first day of the month next following such period. Accounts shall be paid before the end of the month in which the billing occurs. If a payment is not received then the account is subject to penalty. A penalty of \$5.00 per month will be added to all water and sewer accounts at the end of the month if a payment has not been applied to the account. If account remains unpaid after three months, a 7 day written notice will be issued and if it remains unpaid the water service will be discontinued. When the water service is cut off, it shall not be turned on until all arrears and penalties have been paid, together with a fee of \$50.00 to cover the expenses of turning off the water and turning it on again; provided that if it is required to turn on the water service outside the employees' regular working hours, the fee shall be \$75.00 for reconnection.
5. The Village of Dysart shall have the right to meter and sell water, from a discharge pipe at the water plant. The fee for water sold in this manner is set forth in Schedule "D" attached hereto. No customer of such water service shall allow any chemical to be within 100 meters of the plant. A fine of \$1000.00 will be levied on anyone who disobeys the order.
6.
 - a) At year end, arrears may be transferred to the taxes of that property.
 - b) A provision will be made that if the water arrears are not paid by December 31 of that year a penalty equal to the tax arrears penalty will added to the water arrears.
7. Bylaws No. 02/12 are repealed.

The rates, charges, tolls or rents contained in this bylaw shall come into force and take effect on the day of approval being issued by the Local Government Committee.

Mayor

Clerk/Administrator

Certified a true copy of
Bylaw No. 04/12
adopted by resolution of Council
on the 14th of August 2012.

(SEAL)

Clerk/Administrator

**OF
SCHEDULE "A"
TO BYLAW NO. 04/12**

1. MONTHLY WATER RATES:

3000 gallons of water or less	Minimum \$25.00
Over 3000 gallons	\$ 2.00 per 1000 gallons or part thereof

**OF
SCHEDULE "B"
TO BYLAW NO. 04/12**

MONTHLY SEWER SERVICE CHARGES:

Normal Sewer Rate	\$ 11.00
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**OF
SCHEDULE "C"
TO BYLAW NO. 03/14**

MONTHLY WATER AND SEWER INFRASTRUCTURE FEE'S:

Infrastructure Sewer fee	\$ 4.50
Infrastructure Water Fee	\$ 10.50

**OF
SCHEDULE "D"
TO BYLAW NO. 04/12**

THE FOLLOWING RATE SHALL BE CHARGED TO PERSONS OBTAINING WATER FROM THE COIN OPERATED DISCHARGE PIPE LOCATED AT THE WATER TREATMENT PLANT ON RAILWAY AVENUE.

\$2.00 for each 250 gallons.

ANNUAL WATERWORKS INFORMATION AVAILABLE AT THE MUNICIPAL OFFICE BY SEPTEMBER 1 OF EACH YEAR.

**Village of Dysart
Date: November 12, 2013**

WATERWORKS RATE POLICY ESTABLISHED BY BYLAW 04/12

On August 14, 2012 the Village of Dysart Council passed by resolution, Bylaw 04/12.

Under this bylaw the rate charged for water is \$25.00 for 3,000 gallons of water or less per month. Currently waterworks are self-financing and in the past have generated some revenue. The Village has chosen to keep this rate at a constant level until the time that it is no longer self-sustaining.

Waterworks operating costs include all expenditures such as salaries, training, power, telephone, insurance, fuel, heat, repairs, maintenance, minor upgrades, amortization, etc. Revenue is strictly generated from water sales and sewer charges. The \$25.00 per month fee does not include an infrastructure fee.

On August 14, 2012 Council introduced an Infrastructure Water and Sewer reserve fund. In 2012 and part of 2013 this charge was \$5.00 per month per water service connection. Also at this time a late payment penalty was introduced for unpaid accounts. Council also dedicated some surplus monies to this reserve account. At the end of 2012 the reserve account had \$13,630.85. In July of 2013 Council received approval to increase the infrastructure fee; Bylaw 03/13; from \$5.00 to \$10.00 per month. During 2013 the Village also allocated the 2012 surplus from water works portfolio and a significant portion of the 2012 New Deal Gas tax to the reserve. To date the Village has \$42,090.65 in this account, and by the end of 2013 it is estimated to have close to \$63,000.00 set aside.

It is estimated that the Village will need to increase the infrastructure fees in the next year as well, by increasing them slowly it should minimize impact on the users and allow for future budgeting.

The reason for this reserve account was to set up a saving's plan for the replacement of the waterlines in the Village. The waterlines are currently old as they were installed in 1964. They have long since past there useful lives and are in desperate need of replacement.

WATERWORKS CAPITAL INVESTMENT STRATEGY

On November 12, 2013 council passed a resolution on a capital investment strategy.

The objective of the waterworks capital investment strategy is to address the replacement of the waterworks aging infrastructure in the Village to ensure that it can provide safe drinking water to residents and businesses.

To cover the costs of the replacement of the infrastructure Council will likely need to increase the infrastructure fee's, transfer monies from surplus to the reserve account, secure major grant funding and long term borrowing.

In the beginning of 2013, the Village employed the services of the engineer firm, Pinter and Associates from Saskatoon, Saskatchewan, to help prepare and assemble the Waterline Replacement Project. A quote/estimate has been received, and the following capital plan has been established.

Project	Planned Year of Completion	2013 Estimate	Source of Funding
Waterline Replacement	2014	\$1,255,000.00	Building Canada Fund Reserves & Surplus New Deal Gas Tax Long Term Borrowing

It is the intent of Council, if funding can be secured from the Building Canada Fund in 2014, to complete the project in 2014 as well. The engineering plans have been completed earlier this year. It is of utmost importance that funding can be secured so that the small village of over 200 residents can have safe drinking water. This small village cannot afford to complete a project of this magnitude without grants and funding, so securing funding is crucial.

Public Reporting on Municipal Waterworks Regulations

2014 Waterworks Financial Overview:

- Total waterworks revenues – \$71,428.15
- Total waterworks expenditures – \$71,220.09
- Total debt payment on waterworks infrastructure loans – None
- Comparison of waterworks revenues to expenditures plus debt payments, expressed as a ratio:

$$\frac{\$71,428.15}{(\$71,220.09) + (\$0.00)} = 1.0029 \text{ (for 2014, waterworks revenues covered 1.003\% of the waterworks expenditures plus we have a surplus of \$208.06)}$$

The following waterworks information is available at the municipal office for public viewing and on the Village of Dysart website; www.dysartsk.ca

- The November 12, 2013 waterworks rate policy and capital investment strategy – **see attached Bylaw 04/12 and policy**
- The above financial information was not included in the following transfer, the Village transferred all the infrastructure funds collected, late payment penalties plus the applicable portion of the New Deal Gas tax funds to the waterworks reserve fund in 2014 for a total transfer of – **\$27,189.35**
- A total of **\$16,850.58** was transferred out of the reserve to reflect the cost of the work that was completed in 2014.
- Waterworks Reserve for the end of 2014 - **\$73,321.58**
- the 2014 waterworks assessment –**see attached water compliance inspection report for 2014**
- capital plans in place and related sources of funding for the projects –
 - **Replacement of waterlines on a portion of Qu’Appelle Avenue. Funding will be from the allocated reserve.**
- Please note that the cost of waterworks does not include any administration costs. The cost of administration and portion of related costs comes to a \$32,876.40. **See the Village office for the complete list of expenses.**

Revenue	\$71,428.15
Expenses Water	\$71,220.09
Expenses Admin	<u>\$32,876.40</u>
Total Expenses	<u>\$104,096.49</u>
Surplus Transfer	<u>\$16,850.05</u> to pay for the Waterline replacement
Loss	<u>\$15,818.29</u>