Dufferin Water Co. LTD 13 Rose Ridge Lane Mono On L9W 5Y3 Phone519 942 5695 Fax 519 940 3956

24 February 2025

Town of Grand Valley 5 Main S. N. Grand Valley, ON L9W 5S6

Attn: Meghan Townsend, CAO/Clerk-Treasurer

Re: Grand Valley Water System – Annual Summary Report for 2024

Dear Meghan:

Attached is the 2024 Summary Report for the Grand Valley Water Supply System. This report was prepared by Dufferin Water Co. Ltd on behalf of the Town of Grand Valley in accordance with Schedule 22 of O. Reg 170/03 filed under the Safe Drinking Water Act (SDWA).

The summary report is required to be prepared, not later than March 31 of each year for the preceding calendar year and given to the members of the municipal council; please ensure this distribution.

Also attached to this letter is a copy of the 2024 Annual Report for the Grand Valley Water Supply System. This report should be made available to the public at the Municipal office and if possible on the municipal website.

If you have any questions regarding the report please call.

Regards,

Joe Miedema P. Eng. General Manager



Grand Valley Water Supply System Large Municipal Residential Drinking Water System

Schedule 22 Summary Report

For the Period:

January 01, 2024 to December 31, 2024

Prepared for the Town of Grand Valley By Dufferin Water Co. Ltd

Introduction

Schedule 22 of O. Reg 170/03 requires the preparation by the water system owner of a "Summary Report for Municipalities." This requirement only applies to large and small municipal residential systems. The Grand Valley Water Supply System is classified as a Large Municipal Residential Drinking Water System.

The Summary Report for the preceding year is to be issued by March 31 of the following year. This report was prepared by Dufferin Water Co. Ltd on behalf of the Town of Grand Valley.

Distribution of the Summary Report is the responsibility of the owner. For a municipality that owns the water supply, all members of council are to receive the report. If the water system is owned by a municipal service board established under Section 195 of the Municipal Act, 2001 then all members of that board are to receive the report. Finally, if a water supply provides water to another municipality under contract, then the water supply owner shall, give by March 31 a copy of the Summary Report to the Municipality being supplied.

The contents of the Summary Report for the municipality must include the following:

- 1. A list of the requirements of the Safe Drinking Water Act and its regulations that the water system failed to meet during the reporting period, including the duration of the failure.
- 2. A list of the requirements of the water system's license that the water system failed to meet during the report period, including the duration of the failure.
- 3. A list of any Orders that the water system failed to meet during the report time frame, including the duration of the failure.
- 4. For each of the above failures, a description of the measures taken to correct the failure.
- 5. A summary of the quantities and flow rates of water supplied "including monthly average, maximum daily flows, and daily instantaneous peak flow rates." (*Information is to enable the owner to assess the capability of the water system to meet existing and future demand*).
- 6. A statement that captures the comparison of the flow information to the rated capacity and flow rates stated in the water supply's approval.

Issues of Non-Compliance

The following table lists the requirements of the Act, Regulations, System Approval (s) and any order that the system failed to meet at any time during the reporting period and measures taken to correct each failure:

Drinking Water Legislation	Requirements system failed meet	the to	Duration	Corrective Action(s)	Status
N/A					

Assessment of System Flows and Rates of Water Taking

The following table lists the quantities and flow rates of the water supplied during this reporting period, including monthly average and maximum daily flows, daily instantaneous peak flow rates and a comparison to the rated capacity and flow rates specified in the system approval:

Well Number One

Month	Average Daily Volume (m ³)	Percent Of Approved Volume	Maximum Daily Volume (m ³)	Percent Of Approved Volume	Mega Litres Pumped During Month
January	539	24%	804	35%	16.7
February	618	27%	761	33%	17.9
March	553	24%	710	31%	17.1
April	350	15%	717	31%	10.5
Мау	476	21%	844	37%	14.7
June	531	23%	915	40%	15.9
July	436	19%	699	31%	13.5
August	290	13%	466	20%	9.0
September	318	14%	507	22%	9.5
October	280	12%	391	17%	8.7
November	379	17%	503	22%	11.4
December	435	19%	1160	51%	13.5
	158.5				

Approved Daily Volume:2290 cubic metresApproved Flow Rate:1590 litres/minute

Flow control is in the form of a variable speed drive that controls the flow via managing the frequency of the power supply. The drive limits the flow of water from the well and prevents the pump from exceeding the permitted flow rates. The average pumping rate when the pump is running is 1020 Litres/minute.

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Well Number Two

Approved Daily Volume:1308 cubic metresApproved Flow Rate:908 litres/minute

Month	Average Daily Volume (m ³)	Percent Of Approved Volume	Maximum Daily Volume (m ³)	Percent Of Approved Volume	Mega Litres Pumped During Month
January	77	6%	697	53%	2.4
February	0	0%	1	0%	0.0
March	0	0%	1	0%	0.0
April	225	17%	907	69%	6.7
Мау	173	13%	725	55%	5.4
June	0	0%	1	0%	0.0
July	0	0%	1	0%	0.0
August	0	0%	1	0%	0.0
September	0	0%	1	0%	0.0
October	0	0%	1	0%	0.0
November	0	0%	3	0%	0.0
December	0	0%	1	0%	0.0
			Total Annu	al Mega Litres	14.5

Flow control is in the form of a variable speed drive that controls the flow via managing the frequency of the power supply. The drive limits the flow of water from the well and prevents the pump from exceeding the permitted flow rates. The average pumping rate when the pump is running is 700 Litres/minute.

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Well Number Three

Approved Daily Volume: 654 cubic metres Approved Flow Rate: 454 litres/minute

Month	Average Daily Volume (m ³)	Percent Of Approved Volume	Maximum Daily Volume (m ³)	Percent Of Approved Volume	Mega Litres Pumped During Month
January	93	14%	254	39%	2.9
February	83	13%	95	14%	2.4
March	83	13%	138	21%	2.6
April	82	13%	128	20%	2.5
Мау	89	14%	127	19%	2.8
June	68	10%	109	17%	2.0
July	60	9%	85	13%	1.9
August	144	22%	176	27%	4.5
September	151	23%	177	27%	4.5
October	137	21%	157	24%	4.3
November	0	0%	4	1%	0.0
December	51	8%	121	18%	1.6
			Total Annu	al Mega Litres	31.8

Flow control is in the form of a variable speed drive that controls the flow via managing the frequency of the power supply. The drive limits the flow of water from the well and prevents the pump from exceeding the permitted flow rates. The average pumping rate when the pump is running is 192 Litres/minute.

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Well Number Five

Approved Daily Volume:2229 cubic metresApproved Flow Rate:1548 litres/minute

Month	Average Daily Volume (m ³)	Percent Of Approved Volume	Maximum Daily Volume (m ³)	Percent Of Approved Volume	Mega Litres Pumped During Month
January	0	0%	0	0%	0.0
February	0	0%	0	0%	0.0
March	0	0%	0	0%	0.0
April	0	0%	0	0%	0.0
Мау	0	0%	2	0%	0.0
June	129	6%	397	17%	3.9
July	321	14%	457	20%	9.9
August	281	12%	388	17%	8.7
September	264	12%	446	19%	7.9
October	254	11%	373	16%	7.9
November	355	16%	404	18%	10.7
December	278	12%	784	34%	8.6
			Total Annu	al Mega Litres	57.6

Flow control is in the form of a variable speed drive that controls the flow via managing the frequency of the power supply. The drive limits the flow of water from the well and prevents the pump from exceeding the permitted flow rates. The average pumping rate when the pump is running is 1020 Litres/minute.

All four wells combined

Approved Daily Volume: 6481 cubic Metres

Month	Average Daily Volume (m ³)	Percent Of Approved Volume	Maximum Daily Volume (m ³)	Percent Of Approved Volume	Mega Litres Pumped During Month
January	709	31%	902	14%	22.0
February	700	31%	851	13%	20.3
March	636	28%	794	12%	19.7
April	657	29%	922	14%	19.7
Мау	738	32%	938	14%	22.9
June	728	32%	1033	16%	21.8
July	817	36%	1059	16%	25.3
August	716	31%	902	14%	22.2
September	733	32%	892	14%	22.0
October	672	29%	770	12%	20.8
November	734	32%	868	13%	22.0
December	765	33%	1676	26%	23.7
		Total /	Annual Mega Li	itres All Wells	262.5



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking Water System Number:	220007016
Drinking Water System Name:	Grand Valley Water Supply System
Drinking Water System Owner:	Town of Grand Valley
Drinking Water System Category:	Large Municipal Residential
Period being reported:	January 01, 2024 to December 31, 2024

<u>Complete if your Category is Large</u> <u>Municipal Residential or Small Municipal</u> <u>Residential</u>	<u>Complete for all other Categories</u> Number of Designated Facilities served:
Does your Drinking Water System serve more than 10,000 people? Yes [] No [x]	N/A Did you provide a copy of your annual
Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []	report to all Designated Facilities you serve? Yes [] No []
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be	Number of Interested Authorities you report to: N/A
available for inspection.	Did you provide a copy of your annual
Town of Grand Valley 5 Main Street North Grand Valley, ON L9W 5S6	report to all Interested Authorities you report to for each Designated Facility? Yes [] No []

Note: For the following tables below, additional rows or columns may be added, or an appendix may be attached to the report

List all Drinking Water Systems (if any), which receive all their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	

Did you provide a copy of your annual report to all Drinking Water System owners that are connected to you and to whom you provide all drinking water? Yes [] No []



Drinking Water Systems Regulation O.Reg.170/03

Indicate how you notified system users that your annual report is available and is free of charge.

- [X] Public access/notice via the web
- [] Public access/notice via Government Office
- [] Public access/notice via a newspaper
- [] Public access/notice via Public Request
- [] Public access/notice via a Public
- Library
- [] Public access/notice via other method_

Describe your Drinking Water System

Water System is classified as a Large Municipal Residential Water System that currently serves approximately 1200 service connections. The system is owned by the Town of Grand Valley and operated by Dufferin Water Co. Ltd. Water is supplied via four municipal wells, a water tower and 3 pumphouses. Inspection, maintenance and sampling are conducted on a regular basis in accordance with Ontario Regulation 170/03 to ensure the safety of the water supply

List all water treatment chemicals used over this reporting period

12 % Sodium Hypochlorite

Were any significant expenses incurred to?

[]Install required equipment

[XX]Repair required equipment

[]Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

Refurbish Water tower August to December 2024 +/- \$1.1 million

Provide details on the notices submitted in accordance with subsection 18 (1) of the Safe Drinking Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date



Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E. Coli Results (min#)-(max#)	Range of Total Coliform Results (min#)-(max#)	Number of HPC Samples	Range of HPC Results (min#)-(max#)
Raw	190	0 to 0	0 to 0	0	N/A
Treated	138	0 to 0	0 to 0	138	0 to 2100
Distribution	157	0 to 0	0 to 0	52	0 to 1

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min#)-(max#)	Unit of Measure
Turbidity	43	0.17 to 0.83	NTU
Chlorine	8760	0.26 to 2.77	ppm
Fluoride(If the DWS provides fluoridation)	N/A	N/A	N/A

NOTE: For continuous monitors use 8760 as the number of samples

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

	Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
ľ	V/A				
ľ	N/A				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Dec 17/24	ND	ug/L	NO
Arsenic	Dec 17/24	ND	ug/L	NO
Barium	Dec 17/24	17 to 22	ug/L	NO
Boron	Dec 17/24	79 to 93	ug/L	NO
Cadmium	Dec 17/24	ND	ug/L	NO
Chromium	Dec 17/24	ND	ug/L	NO
*Lead	N/A	N/A	N/A	N/A
Mercury	Dec 17/24	ND	ug/L	NO
Selenium	Dec 17/24	ND	ug/L	NO
Sodium	Oct 23/23	21 to 39	mg/L	YES
Uranium	Dec 17/24	ND to 0.20	ug/L	NO
Fluoride	Aug 18/23	1.5 to 1.8	mg/L	NO/YES
Nitrite	Dec 11/24	ND	mg/L	NO
Nitrate	Dec 11/24	ND	mg/L	NO

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems



Summary of lead testing under Schedule 15.1 during this reporting

period(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#)–(max #)	Unit of Measure	Number of Exceedances
Plumbing	N/A	N/A	N/A	N/A
Distribution	4	ND	Ug/L	0

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Dec 17/24	ND	ug/L	NO
Atrazine + N-dealkylated metobolites	Dec 17/24	ND	ug/L	NO
Azinphos-methyl	Dec 17/24	ND	ug/L	NO
Benzene	Dec 17/24	ND	ug/L	NO
Benzo(a)pyrene	Dec 17/24	ND	ug/L	NO
Bromoxynil	Dec 17/24	ND	ug/L	NO
Carbaryl	Dec 17/24	ND	ug/L	NO
Carbofuran	Dec 17/24	ND	ug/L	NO
CarbonTetrachloride	Dec 17/24	ND	ug/L	NO
Chlorpyrifos	Dec 17/24	ND	ug/L	NO
Diazinon	Dec 17/24	ND	ug/L	NO
Dicamba	Dec 17/24	ND	ug/L	NO
1,2-Dichlorobenzene	Dec 17/24	ND	ug/L	NO
1,4-Dichlorobenzene	Dec 17/24	ND	ug/L	NO
1,2-Dichloroethane	Dec 17/24	ND	ug/L	NO
1,1- Dichloroethylene(vinylidenechl oride)	Dec 17/24	ND	ug/L	NO
Dichloromethane	Dec 17/24	ND	ug/L	NO
2-4Dichlorophenol	Dec 17/24	ND	ug/L	NO
2,4-Dichlorophenoxyaceticacid(2,4-D)	Dec 17/24	ND	ug/L	NO
Diclofop-methyl	Dec 17/24	ND	ug/L	NO
Dimethoate	Dec 17/24	ND	ug/L	NO
Diquat	Dec 17/24	ND	ug/L	NO
Diuron	Dec 17/24	ND	ug/L	NO
Glyphosate	Dec 17/24	ND	ug/L	NO
HAAs(<i>Note</i> : show latest running annual average)	2024	ND	ug/L	NO
Lindane(Total)	Dec 17/24	ND	ug/L	NO
Malathion	Dec 17/24	ND	ug/L	NO
Metolachlor	Dec 17/24	ND	ug/L	NO
Metribuzin	Dec 17/24	ND	ug/L	NO
Monochlorobenzene	Dec 17/24	ND	ug/L	NO



Drinking Water Systems Regulation O.Reg.170/03

Paraquat	Dec 17/24	ND	ug/L	NO
Pentachlorophenol	Dec 17/24	ND	ug/L	NO
Phorate	Dec 17/24	ND	ug/L	NO
Picloram	Dec 17/24	ND	ug/L	NO
Polychlorinated Biphenyls (PCB)	Dec 17/24	ND	ug/L	NO
Prometryne	Dec 17/24	ND	ug/L	NO
Simazine	Dec 17/24	ND	ug/L	NO
Terbufos	Dec 17/24	ND	ug/L	NO
Tetrachloroethylene (perchloroethylene)	Dec 17/24	ND	ug/L	NO
2,3,4,6-Tetrachlorophenol	Dec 17/24	ND	ug/L	NO
THMs	2024	3.05	ug/L	NO
(<i>Note:</i> show latest running annual average)				
Triallate	Dec 17/24	ND	ug/L	NO
Trichloroethylene	Dec 17/24	ND	ug/L	NO
2,4,6-Trichlorophenol	Dec 17/24	ND	ug/L	NO
Trifluralin	Dec 17/24	ND	ug/L	NO
Vinyl Chloride	Dec 17/24	ND	ug/L	NO
МСРА	Dec 17/24	ND	ug/L	NO

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

Parameter	Result Value	Unit of Measure	Date of Sample
Sodium	21 to 39	ppm	Oct 23/23
Fluoride	1.5 to 1.8	ppm	Aug 18/23