

Annual Report – Small Water System

DEWDNEY ELEMENTARY

As required under Section 15 of the Drinking Water Protection Act, water suppliers are to report the water quality monitoring results to the water system users on an annual basis.

Report Date: June 6, 2019

Reporting Period: January 1, 2018 to December 31, 2018

Owner: Board of School Trustees, School District No. 75 (Mission)

Any questions concerning this report please contact:

Ray Seifert, Director of Facilities
School District No. 75 (Mission)
33940 Dlugosh Avenue
Mission, BC V2V 6B2
Phone: 604.826.7375
Email: ray.seifert@mpsd.ca

Water System Classification:

Classified as a Small Water System by Environmental Operators
Certification Program

Certified Operators for the Small Water System:

School District No. 75 (Mission) has two (2) employees certified as
Small Water System Operators

**Results of Coliform/E. coli monitoring as per Section 11 of the Act and Section 8 of the
Regulations:**

Attached

Results of chemical analysis conducted during the period covered by this report:

Attached

**SCHOOL DISTRICT #75 (MISSION)
EMERGENCY RESPONSE PLAN**

SMALL WATER SYSTEMS

Part A: Well Water Quality

1. The Facilities Department will conduct routine sampling of all well water in the district to be tested by a certified test lab.
2. In the event of adverse well water test results, the following procedures, in accordance with the Guidelines for Canadian Drinking Water Quality, will apply:
 - a. Contact Barbara Haworth or alternate at Fraser Health Authority
 - b. An alternative source of water will be supplied and corrective action taken in consultation with the applicable governing agency if:
 - i. A sample contains more than ten (10) total coliforms per 100 ml.
 - ii. A sample contains any fecal coliform.
 - iii. Any consecutive samples from the same site show the presence of coliform.
 - iv. A sample shows an unsuitable compound of chemical.
 - c. If total coliform organisms are detected from a single sample, the site shall be re-sampled until three (3) consecutive samples comply with the regulations.
 - d. Alternative water supply will continue until three (3) consecutive samples comply with the Drinking Water Protection Act and Regulations.
 - e. All sources of drinking water on site will be tagged "Do Not Drink" and sealed from use where possible.

Part B: Loss of Water Supply

In the event of disruption in the water supply, immediately notify Brian Standing or alternate at Fraser Health Authority. District staff will be dispatched immediately to assess and correct the situation.

- a. Should it be determined that the disruption will exceed two (2) hours, alternate sources of water (dispensers) will be provided to the site.
- b. Should the disruption exceed one (1) day, either a delivery system will be installed at the site or students will be relocated to an unaffected site.

Part C: Emergency Contacts

In the event of any abnormal operating condition or emergency effecting or potentially affecting the water system, please contact one of the following managers from the Facilities Department at 604.826.7375 or directly at the numbers provided. They will then contact Fraser Health Authority immediately.

	Cell Phone #
Ray Seifert, Director of Facilities	604.302.4607
Bob Rudd, Engineering Foreman	604.302.4161

Part D: Questions or Concerns

If you have any questions or concerns regarding this Emergency Response Plan for Small Water Systems, please contact one of the Fraser Health Authority water inspectors at 604.870.7900 or at the numbers provided:

	Work #	After Hour #s
Medical Health Officer	604.587.3828 1.877.342.6467	604.527.4806
Barbara Haworth, Drinking Water Program	604.870.7920	604.615.1140

Part E: Emergency Contact Numbers

Dewdney Elementary School	604.826.7375
Ferndale Elementary School	604.826.7375
Silverdale Elementary School	604.826.7375
Stave Falls Elementary School	604.826.7375

EMERGENCY RESPONSE & CONTINGENCY PLAN

Water System Name: Dewdney Elementary

Emergency Contacts	Name and Title	Phone	Fax	E-mail
Water System - Primary Contact (person responsible for receiving call from lab and/or FHA)	Bob Rudd Foreman	604-826-7375 604-302-4161	604-826-9273	bob.rudd@mpsd.ca
Water System - Secondary Contact (Should primary contact be ill or on vacation etc.)	Ray Seifert Director	604-826-7375 604-302-4607	604-826-9273	ray.seifert@mpsd.ca
Water System Owner	SD75 Mission	604-826-7375 Cell: n/a	604-826-9273	
Fraser Health Authority Contacts				
Environmental Health Officer	Barbara Haworth	604-870-7900	604-870-7901	barb.haworth@fraserhealth.ca
Medical Health Officer		604-587-3828 1-877-342-6467	604-556-5077	
Fraser Health After Hours Contact (After 4:30 pm or on weekends)	Fraser Health On-Call Staff	604-527-4806		
Emergency Contacts				
Alternate Source of Water i.e. bottled water or bulk supply	Bottled water			
Plumbing Services	own			
Equipment Services i.e. Treatment/pumps	own			
Electrical Services	own			
B.C. Hydro				
Other				

Signature: R. McCaw

Title: Foreman Engineering Dept

Name: Bob Rudd

Date: June 6, 2019

Sample Range Report

Fraser Health Authority

Facility Name: Dewdney Elementary School WS

Date Range: Jan 1 2018 to Dec 31 2018

Operator School District #75 - Bob Rudd
33919 Dewdney Trunk Rd
Mission, BC V2S 4Y4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
---------------	----------------	----------------	---------	----------------

Staff Room Kitchen
Tap, 37151 Hawkins
Pickle Rd

1-9-2018	L1	L1	
1-16-2018	L1	L1	
1-23-2018	L1	L1	
1-30-2018	L1	L1	
2-6-2018	L1	L1	
2-27-2018	L1	L1	
3-7-2018	L1	L1	
4-24-2018	L1	L1	
5-1-2018	L1	L1	
5-22-2018	L1	L1	
6-5-2018	L1	L1	
6-19-2018	L1	L1	
6-26-2018	L1	L1	
8-7-2018	L1	L1	
8-21-2018	L1	L1	
8-28-2018	L1	L1	
9-5-2018	L1	L1	
9-12-2018	L1	L1	
9-25-2018	L1	L1	
10-2-2018	L1	L1	
11-6-2018	L1	L1	
11-13-2018	L1	L1	
11-27-2018	L1	L1	
12-5-2018	L1	L1	
12-18-2018	<u>L1</u>	<u>L1</u>	
Total Positive:	0	0	0

Library Sink, 37151
Hawkins Pickle Rd

2-13-2018	L1	L1	
2-20-2018	L1	L1	
3-20-2018	L1	L1	
4-17-2018	<u>L1</u>	<u>L1</u>	
Total Positive:	0	0	0

PAC Kitchen Tap,

37151 Hawkins
Pickle Rd

3-13-2018	L1	L1	
3-27-2018	L1	L1	
4-3-2018	L1	L1	
4-10-2018	L1	L1	
5-29-2018	L1	L1	
6-12-2018	L1	L1	
7-10-2018	L1	L1	
9-18-2018	L1	L1	
10-9-2018	L1	L1	
10-30-2018	L1	L1	
11-20-2018	L1	L1	
12-11-2018	<u>L1</u>	<u>L1</u>	
Total Positive:	0	0	0

AUDIT Dewdney
School - Medical
Room, Hawkins
Pickle Road

4-11-2018	L1	L1	
4-17-2018	L1	L1	
5-29-2018	<u>L1</u>	<u>L1</u>	
Total Positive:	0	0	0

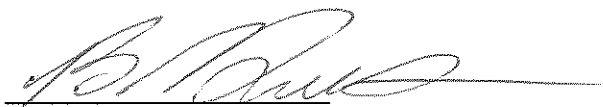
Montessori Sink,
37151 Hawkins
Road

5-15-2018	L1	L1	
7-3-2018	L1	L1	
7-24-2018	L1	L1	
10-16-2018	L1	L1	
10-23-2018	<u>L1</u>	<u>L1</u>	
Total Positive:	0	0	0

Result Values: **E - estimated** **L - less than** **G - greater than**

Samples that contain total coliform:	0		0.00% of total
Samples that contain e. coli:	0		0.00% of total
Samples that contain fecal coliform:	0		0.00% of total
Number of consecutive samples that contain total coliform:	0		
Number of samples that contain total coliform in last 30 days:	0/1		
Total number of samples:	49		

Comments:



Environmental Health Officer

Jan 21 2019

FOR FURTHER INFORMATION PLEASE CALL: Barb Haworth (604) 870-7900

Project Information

Project ID: ANMAL
Project Name: ANMAL
Project Location:
Legal Location:
PO/A/E/F:
Proj. Acct. Code:
Quote #:

Invoice to: SD # 75
Company: SD # 75
Address:
Attention: Bob Rudd
Phone: 609-302-4161
Cell:
Fax:
E-mail:
Agreement ID:
Copy of report:

Report To: F.H. Bob
Company: F.H. Bob
Address:
Attention:
Phone:
Cell:
Fax:
E-mail 1:
E-mail 2:
Copy of invoices:

RUSH Priority

Emergency (contact lab for turnaround and pricing)
Priority 1-2 working days (100% surcharge)
Urgent 2-3 working days (50% surcharge)

Date Required: _____ Signature: _____

Special Instructions/Comments (please include contact information including ph, if different from above):
SEPARATE LOTS REAST

Site ID	Sample Description	Depth start and end in cm in	Date/Time Sampled	Matrix	Sampling Method	Number of Containers	Enter tests above (✓ relevant samples below)
1	STATE ROOM DEWIDNEY ELEMENTARY	<u>110</u>	<u>MAR 14 @ 9:35AM</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>W9</u>	<u>XXX</u>
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

Submission of this form acknowledges acceptance of Exova's Standard Terms and Conditions (<http://www.exova.com/about/terms-and-conditions>)
Please indicate any potentially hazardous samples

Page _____ of _____ Control # _____



Shipping: # and size of coolers
Temp. received: 3.3 °C
Delivery Method: HAND
Waybill:
Received by: RE

Report Results Regulatory Requirement

E-Mail	HCDWQG
Mail	Ab Tier 1
Online	SPIGEC
Fax	BCCSR
PDF	Other (list below)
Excel	
QA/QC	

Sample Custody (please print)
Sampled by:
Company:
Date/Time stamp: MAR 14 2008 09:35

This section for Lab use only

Indicate in the space allotted any deficiencies by the corresponding number.

1. Indicate any samples that were not packaged well
2. Indicate any samples not received in Exova supplies
3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

Exova
 #104, 19575-55 A Ave.
 Surrey, British Columbia
 V3S 8P8, Canada

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Report Transmission Cover Page

Bill To: School District #75 - Mission	Project ID: Annual	Lot ID: 1338572
33940 Dlugosh Avenue	Project Name: Dewdney Elementary	Control Number:
Mission, BC, Canada	Project Location: Staff Room Tap	Date Received: Mar 14, 2019
V2V 6B4	LSD:	Date Reported: Mar 19, 2019
Attn: Accounts Payable	P.O.:	Report Number: 2387097
Sampled By:	Proj. Acct. code:	
Company:		

Contact	Company	Address
Accounts Payable	School District #75 - Mission	33940 Dlugosh Avenue Mission, BC V2V 6B4 Phone: (604) 826-7375 Fax: (604) 820-0927 Email:

Delivery	Format	Deliverables
Automated Fax	PDF	Invoice
Barbara Haworth	Fraser Health Authority	207 - 2776 Bourquin Crescent Abbotsford, BC V2S 6A4 Phone: (604) 870-7911 Fax: (604) 870-7901 Email: barb.haworth@fraserhealth.ca

Delivery	Format	Deliverables
Email - Single Report	PDF	Test Report
Bob Rudd	School District #75 - Mission	33918 Dewdney Trunk Road Mission, BC V2V 5X4 Phone: (604) 826-7375 Fax: (604) 820-0927 Email: bob.rudd@mpsd.ca

Delivery	Format	Deliverables
Email - Multiple Reports By Agreement	PDF	COC / Test Report
Email - Single Report	PDF	COA
Email - Single Report	PDF	COR
Email - Single Report	PDF	Invoice

Notes To Clients:

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Analytical Report

Bill To: School District #75 - Mission	Project ID: Annual	Lot ID: 1338572
33940 Dlugosh Avenue	Project Name: Dewdney Elementary	Control Number:
Mission, BC, Canada	Project Location: Staff Room Tap	Date Received: Mar 14, 2019
V2V 6B4	LSD:	Date Reported: Mar 19, 2019
Attn: Accounts Payable	P.O.:	Report Number: 2387097
Sampled By:	Proj. Acct. code:	
Company:		

Reference Number	1338572-1
Sample Date	March 14, 2019
Sample Time	09:25
Sample Location	
Sample Description	Dewdney Elementary-Staff Room Tap / 3.3 °C
Sample Matrix	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
Metals Extractable					
Aluminum	Extractable mg/L	<0.001	0.001	0.1	Below OG
Antimony	Extractable mg/L	0.00003	0.00002	0.006	Below MAC
Arsenic	Extractable mg/L	0.0002	0.0001	0.010	Below MAC
Barium	Extractable mg/L	0.0121	0.0001	1	Below MAC
Boron	Extractable mg/L	0.007	0.002	5	Below MAC
Cadmium	Extractable mg/L	0.00002	0.00001	0.005	Below MAC
Chromium	Extractable mg/L	0.00377	0.00005	0.05	Below MAC
Copper	Extractable mg/L	0.1684	0.0005	1.0	Below AO
Lead	Extractable mg/L	0.00026	0.00001	0.005	Below MAC
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC
Uranium	Extractable mg/L	<0.00001	0.00001	0.02	Below MAC
Vanadium	Extractable mg/L	0.00042	0.00005		
Zinc	Extractable mg/L	0.0128	0.0005	5.0	Below AO
Physical and Aggregate Properties					
Colour	True	Colour units	<5	5	
Turbidity		NTU	0.15	0.05	
Routine Water					
pH - Holding Time			Exceeded		
pH	at 25 °C		6.88	0.01	7.0-10.5
Electrical Conductivity		µS/cm at 25 °C	171	1	
Calcium	Extractable mg/L		16	0.01	
Iron	Extractable mg/L		<0.004	0.004	0.3
Magnesium	Extractable mg/L		6.2	0.02	
Manganese	Extractable mg/L		<0.001	0.001	0.05
Potassium	Extractable mg/L		0.43	0.04	
Silicon	Extractable mg/L		12	0.005	
Sodium	Extractable mg/L		5.1	0.1	200
T-Alkalinity	as CaCO3		52	5	
Chloride	Dissolved mg/L		12.5	0.05	250
Fluoride	Dissolved mg/L		0.04	0.01	1.5
Nitrate - N	Dissolved mg/L		1.76	0.01	10
Nitrite - N	Dissolved mg/L		<0.01	0.01	1
Sulfate (SO4)	Dissolved mg/L		2.8	0.1	500
Hardness	as CaCO3 (extractable) mg/L		66	1	
Total Dissolved Solids	Extractable mg/L		115	1	

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Analytical Report

Bill To: School District #75 - Mission 33940 Dlugosh Avenue Mission, BC, Canada V2V 6B4	Project ID: Annual Project Name: Dewdney Elementary Project Location: Staff Room Tap LSD: P.O.: Proj. Acct. code:	Lot ID: 1338572 Control Number: Date Received: Mar 14, 2019 Date Reported: Mar 19, 2019 Report Number: 2387097
Attn: Accounts Payable		
Sampled By:		
Company:		

Approved by:

Carol Nam, Dipl. T.
Quality Officer

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).
Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: School District #75 - Mission	Project ID: Annual	Lot ID: 1338572
33940 Diugosh Avenue	Project Name: Dewdney Elementary	Control Number:
Mission, BC, Canada	Project Location: Staff Room Tap	Date Received: Mar 14, 2019
V2V 6B4	LSD:	Date Reported: Mar 19, 2019
Attn: Accounts Payable	P.O.:	Report Number: 2387097
Sampled By:	Proj. Acct. code:	
Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (BC)	APHA	* Alkalinity - Titration Method, 2320 B	Mar 15, 2019	Exova Surrey
Alk, pH, EC, Turb in water (BC)	APHA	* Conductivity, 2510 B	Mar 15, 2019	Exova Surrey
Alk, pH, EC, Turb in water (BC)	APHA	* pH - Electrometric Method, 4500-H+ B	Mar 15, 2019	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Mar 15, 2019	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Mar 15, 2019	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Mar 15, 2019	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Mar 16, 2019	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Mar 15, 2019	Exova Surrey

* Reference Method Modified

References

APHA	Standard Methods for the Examination of Water and Wastewater
US EPA	US Environmental Protection Agency Test Methods

Guidelines

Guideline Description	Health Canada GCDWQ
Guideline Source	Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017
Guideline Comments	MAC = Maximum Acceptable Concentration AO = Aesthetic Objective OG = Operational Guideline for Water Treatment Plants (does not apply to private groundwater wells). Refer to Health Canada for complete guidelines at www.hc-sc.gc.ca

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

Please direct any inquiries regarding this report to our Client Services Group or to the Operations Manager at the coordinates indicated at the top left of this page.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, (year) 2018

Water System DENDNEY ELEMENTARY

Water System Owner S#75 MISSION

Primary Contact Name (Operator or Manager) Bob Rudd

Phone Number (Operator or Manager) 604-302-4161

E-mail (Operator or Manager) bob.rudd@mpsd.ca

DESCRIBE YOUR WATER SUPPLY SYSTEM

What is the Source(s) of Raw Water?

Deep Well Shallow Well Surface Water Other

If other, specify details: SAND POINT

Does the Drinking Water System have Primary Disinfection? Yes No

Chlorination Ultraviolet Light Ozone Other

If other, specify details: FILTER

Does the Drinking Water System have Secondary Disinfection? Yes No

Chlorination Other

If other, specify details:

Does the Drinking Water System have Filtration? Yes No

Check all boxes that apply

Cartridge Filter(s) Carbon Filter Sand Filtration Reverse Osmosis Other

If other, specify details:

PUBLIC REPORTING

Emergency Response & Contingency Plan (ERCP)

Is your ERCP up to Date? Yes No

How do you Inform the System Users of the ERCP?

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details)

Drinking Water System Annual Report

How do you Inform the System Users of the Annual Report?

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details)

COMPLIANCE WITH OPERATING PERMIT

List the conditions that have been placed on your Operating Permit (if you have conditions, these will be stated on your permit):

Are you in compliance with the conditions listed on your Operating Permit? Yes No N/A

BACTERIOLOGICAL TESTING AND DRINKING WATER PROTECTION REGULATION WATER QUALITY STANDARDS

How many bacteriological samples were collected during this reporting period? 51

What is the minimum required sampling frequency for this system? (#samples/month) _____

Additional sampling details: _____

Was the minimum required sampling frequency achieved? Yes No

Comments: _____

Bacteriological summary attached to this report? Yes No

If no, how do the users of the system view the results? _____

WATER QUALITY STANDARDS OF POTABLE WATER

Parameter:	Standard:	Did this system meet standard?	
Escherichia coli (for all samples)	No detectable Escherichia coli per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if only 1 sample collected in a 30 day period)	No detectable total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if more than 1 sample collected in a 30 day period)	No more than 10% of samples contain total coliform bacteria, and No sample has more than 10 total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

If the system did not meet any of above Drinking Water Protection Regulation standards, record the results in the table below; attach additional sheets if necessary.

Date	TC/100ml	E.coli/100ml	Reason	Corrective Action

CHEMICAL SAMPLING COMPLETED DURING THIS REPORTING PERIOD

Was any chemical sampling conducted during reporting period? Yes No

If no, when were the last chemical samples conducted for this system?

(date) Don't Know Never

If yes, did all water samples meet the Guidelines for Canadian Drinking Water Quality?

Yes No

If any water samples did not meet the Guidelines for Canadian Drinking Water Quality, record the results in the table below; attach additional sheets if necessary.

Parameter	Result	Corrective Action / Treatment / Comments

ADDITIONAL TESTING

Does the system have analyzers for continuous monitoring? Yes No

If yes, check all boxes that apply:

Chlorine Turbidity Other (details)

Are the results available on request?

If any additional testing or sampling was conducted, record results in the table below; attach additional sheets if necessary.

Additional Testing & Reason for Sampling	Corrective Action Taken

WATER QUALITY COMPLAINTS

Were there any water quality complaints in this reporting period? (e.g. taste, odour, colour etc.) Yes No

If yes, complete the table below; attach additional sheets if necessary.

Date	Water Quality Complaint	Corrective Action / Treatment

OPERATIONAL PROBLEMS

Were there any operational problems during this reporting period? (e.g. insufficient water supply, malfunction of disinfection equipment, line breaks, elevated turbidity etc.). Yes No

If yes, complete the table below; attach additional sheets if necessary.

Incident Date	Type of Operational Problem	Corrective Action Taken

MAJOR UPGRADES/REPAIRS & EXPENSES

Were there any major upgrades/repairs or any major costs incurred during this reporting period? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Major Upgrades/Expenses	Details
Improvements required by DWO	
Additions/changes to system	
Purchase or install new equipment	
Equipment repair or replacement	
Annual maintenance of system	
Specialist report	
Other	

FUTURE IMPROVEMENTS

Are there any plans for future improvements? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Future Upgrades or Improvements	Estimated Date of Completion

DATE COMPLETED: June 6, 2019	COMPLETED BY: Bob Rana
------------------------------	------------------------