All Sites and Facilities



Application for Waterworks Operating Permit Guide

Page 1 of 10

Water System Type			Sections not required		
Water H	Haulers (trucks)		Environmental Operators Certification Program Classification and Training – not required		
			<i>Source</i> – Select "Hauled from an approved source", enter name of approved source in "Name" (for example, Chetwynd Community Water System)		
			Treatment Plant not required – enter "No Treatment"		
			Distribution not required – enter "No Distribution"		
Hauled	water systems (Cister	rns)	Treatment Plant not required, enter "No Treatment"		
			<i>Source</i> – select "Hauled from an approved source", other fields not required		
All othe	rs		N/A		
1	<u>1</u> Legal Owner Name of leg		gal entity responsible for supplying safe water. May be		
	Pe He		Person in Charge - operator, main on-site contact for Environmental Health Officer (EHO)		
2 Operator/Site Information		Water System Address - physical location of water system, if no street address, use best description of location or km marker (i.e. Km 18.5 Sukunka FSR, or Mile 192 Alaska Hwy)			
		Where water system serves more than one purpose, select what you consider the main purpose			
			Municipal – City, town, village, regional district, municipality, water utility, strata greater than 200 homes		
		Residential – Mobile home park, shared wells, strata less than 200 homes			
	Subtype	Water Hauler – Trucks, bulk fill station			
		Workplace – Industrial, commercial, institutional, offices, factories, other businesses			
3		Work Camp – Forestry camps, drilling camps, temporary camps			
		Licensed Care – Long-term care home, hospital			
		Educational – Schools, day-cares			
		Food – Food services, water bottlers, water dispenser, restaurants, cut & wrap			
		Recreational – Seasonal camps, resorts, RV parks, hotel, B&B, community hall, church			
		Non-potable – Showers and toilets, truck stop washrooms (exempt under s. 3.1 DWPA)			





Page 2 of 10

<u>4</u>	Governance	Choose the applicable governance structure for the water system		
		Lake – includes natural ponds		
	Type (Source)	Flowing – includes rivers, streams, creeks		
		Deep well – greater than 50 ft. (15m) to top of intake screen or uppermost fracture		
		Shallow well – less than 50 ft. (15 m)		
<u>5</u>		Reclaimed water – treated wastewater, only for non-potable uses		
		Infiltration Gallery – has horizontal perforated pipes beside or under a surface water body. Usually considered a surface water source, but could be GARP will if the streambed is not disturbed. If intake pipe is in open water, use Lake or Flowing		
		Other – provide an explanation		
	Source Status	If there is only one source, the status is Sole. If more than one choose from the following for each source:		
		Primary – main source		
		Combined – multiple sources operating or alternating		
<u>6</u>		Demand – only used when demand is high		
		Standby – only used when usual source(s) out of service		
		Seasonal – only operators when water quality in usual source is poor due to seasonal conditions (i.e. spring run-off)		
		Inactive – not used but may still have pump connected		
Z	System Source Classification	To determine if Groundwater is At Risk of containing Pathogens (GARP) provide either a hydrogeology report or complete the GARP Screening tool named "Screening of Groundwater Sources" found of the Public Health Engineering page		
<u>8</u>	Name (Treatment Plant)	Enter "No Treatment" if there is none		
9	Design Flow Rate	Use UV rating in gpm. The operator or a design report may also have this information. If unknown, enter "Unknown"		
<u>10</u>	Treatment Schematic Sketch Attached	If a treatment schematic has not been submitted previously then one is to be attached to the application.		



Page 3 of 10

		Select all suspended solids filters applicable	
		Pre-filtration – for course solids	
		Coagulation/Flocculation – is chemical addition	
		Slow Sand – is flow by gravity through biological layer	
		Rapid Sand – is by gravity and includes multimedia granular filters	
	Filtration Type	Pressure filtration – is similar to a typical pool filter as opposed to gravity flow	
<u>11</u>		Cartridge filtration – uses 10 or 20 in plastic housings – for small water systems	
		Microfiltration – ~0.1 μm	
		Ultrafiltration – ~0.01 μm	
		Nanofiltration – ~0.001 μm	
		Reverse Osmosis (RO) – <0.001 µm	
		Settling/Clarifier – part of a conventional filtration plant	
		Flotation – used at a DAF plant in place of settling.	
		Do NOT enter GAC here, it is chemical treatment	
<u>12</u>	Smallest Filter/ Media Size	Specify "absolute" for cartridge filters validated for cyst removal; "nominal" otherwise. Cartridge and membrane filters are sized in microns. For media filters, enter the effective particle size.	
<u>13</u>	Parameters of Concern	Examples – pH, hardness, Iron, Manganese, Organic Carbon, Arsenic, Lead	
<u>14</u>	Chemical treatment process(es)	List all applicable chemical treatment processes. I.e. softener (cation exchange), activated carbon, RO, greensand-type filtration, stabilisation, oxidation, coagulation, sediment filtration, anion exchange, mixed-bed ion exchange, other (describe)	
<u>15</u>	Primary disinfection	Select all applicable. Primary chlorination must achieve C·T value of 12 min·mg/L. Ultraviolet must meet NSF Class 55A to achieve primary disinfection.	
<u>16</u>	Secondary (residual disinfection)	JalUsually chlorination or none. Usually specified as >0.2 ppm freeavailable chlorine (FAC)	
<u>17</u>	Name (Distribution)) If only one distribution system enter "Distribution System"	
<u>18</u>	Number of connections (buildings)	Each residence or building is one connection (not each fixture within a building).	
<u>19</u>	Maximum population in 24 hours	Use maximum population served in any 24-hr period during the year. For Food, maximum number of customers/day.	
<u>20</u>	Typical population in 24 hours	Typical or average population is a more reasonable estimate of average population, based on operator judgement	



Page 4 of 10

· · · · · · · · · · · · · · · · · · ·	1			
<u>21</u>	Total length of distribution (km)	Can be zero. Don't include service connection lines. Estimate or draw a map to scale. Can include decimals (i.e. 450m = 0.45km)		
	Automated Monitoring	Disinfection residual		
<u>22</u>	Cross connection control program	Cross connection program includes enforcement of an ordinance regulating cross connection (i.e. a by-law, code, or standard). Identify whether a cross connection control program is in place or is included in operating procedures.		
<u>23</u>	Flushing program	EHO will assess whether a flushing program is in place or if it's included as part of regular operating procedures		
<u>24</u>	Residual Disinfection	See #16		
<u>25</u>	Distribution Map Attached	A distribution map is required to be on record. Include applicable components listed in the example		
<u>26</u>	Name (Storage)	Enter "No Storage" if there is none		
<u>27</u>	Construction Material	Select material of storage tank from list		
<u>28</u>	Volume	Enter the volume for each storage tank, not the total of multiple tanks		
<u>29</u>	Turnover Time	How many days or hours would the water last in the storage tank if the source was shut off?		
<u>30</u>	Mixing	Interior of the tank includes mechanical or motorized components to ensure adequate mixing, prevent stagnation, and improve water quality consistency		
<u>31</u>	Baffled	Interior of the tank includes rigid baffles to ensure adequate mixing, prevent stagnation, and improve water quality consistency		
32	Potable	Is the water stored in this tanks safe to drink without additional treatment?		



Page 5 of 10

the nor thern					Page '
Complete all applicable sec	tions. Incomplete applications	s may be retur	ned to the ap	plicant resulting in de	elays
A Owners information		e Environment			
A. Owners information					
Type of ownership (select o	one):				
Legal Owner (e.g. Jane Doe	e or 123456 BC Ltd.):	Common Name of Water System:			
Owner Contact Name:		Owner Contact Number:			
Legal Owner Mailing Addre	ess:	City: Postal Code:			
B. Operator/Site Informatio	n				
Operator information:					
Person in charge (operator):			Phone/Fax:		
Position:	Owner Manager Ot	her:	Cell:		
Water system address:			Email:		
City/municipality:			Postal code:		
Mailing/Billing Information:	same as operator informatic	on			
Mailing address:			Phone:		
City/municipality:	Prov.:		Cell:		
Postal code:			Owner Emai	il:	
Directions to Water System	(if in Remote Location):		*		
C Type of application					
	Owner change	a of operation	ahanga [Data collection/data	undete
Service change	Name change	s change (close	ed/re-open)		upuale
Effective date:		Comments:			
Have you operated a water s	upply system within the Norther	n Health Autho	rity in the past		
If yes, state the name of the	water system:		,		
Will system operate: Year	Round Seasonal				
If seasonal, months of operat	tion: □Jan □Feb □Mar □	Apr 🗆 May 🗆	Jun □_Jul [Aug □ Sep □ Oct	
the Environmental Health O	fficer.	returned to tr	ne applicant.	Any questions should	i de directe
Assigned EHO:				Received:	
Status: Permitted P	ending Approved Deni	ied			
Category (Include number	of connections): 🗌 WS 1 []WS2 ∏W	/S3 □WS4	4	
Signature of the Applicant:			Dat	·e·	





Page 6 of 10

D. Wa	ter Systems Information	
# of s	burces (include backup sources):	
# of tr	eatment plants (do not include point-of-use treatment):	
# of st	orage locations (do not include pressure tanks):	
Compl	ete the following sections for each source, treatment plant, and storage location indicated above.	
Does ti Requir (Microl	he treatment comply with 4-3-2-1-0 treatment objectives: Yes No No Required and for surface water and groundwater at risk of containing pathogens as per the BC Drinking Water Treatment Objective piological)	
Subtype: Municipal Residential Water Hauler Workplace Mobile Camp Work Camp Licensed Care		
Govern	ance: Water Users Community Strata Corporation Partnership Sole proprietorship (individual) Joint (good neighbour) Municipality Regional district Improvement district School District Other local government Health authority BC Hydro BC Parks BC Ferries Other provincia Federal crown corporation Aboriginal Other federal	
Envir	onmental Operators Certification Program Classification and Training	
Envir Has th	onmental Operators Certification Program Classification and Training e drinking water system been classified by EOCP: Yes No	
Envir Has th Water Water	commental Operators Certification Program Classification and Training ue drinking water system been classified by EOCP: Yes No treatment classification: Level 1 Level 2 Level 3 Level 4 Small Water System distribution classification: Level 1 Level 2 Level 3 Level 4 Small Water System	
Envir Has th Water Water Is the If yes, If no, y	commental Operators Certification Program Classification and Training e drinking water system been classified by EOCP: Yes No treatment classification: Level 1 Level 2 Level 3 Level 4 Small Water System distribution classification: Level 1 Level 2 Level 3 Level 4 Small Water System operator certified for this level of classification: Yes No N/A (answered no to above) certified operator name:	
Envir Has th Water Water Is the If yes, If no, y For sn	e drinking water system been classified by EOCP: Yes No treatment classification: Level 1 Level 2 Level 3 distribution classification: Level 1 Level 2 Level 3 operator certified for this level of classification: Yes No certified operator name: EOCP #:	

POU Treatment Description: _



Application for Waterworks Operating Permit Guide

Page 7 of 10

the norther	neaitn n way of caring	Application f	or Waterworks Operating Per Page
SOURCE (please select be If there is more than one s	low) ource, this section will nee	ed to be completed f	or each source
Name:	Address/L	ocation:	City:
Type: Lake Flowing Piped from approve	☐ Spring ☐ Shallow well ed source ☐ Dugout ☐	Deep well Infil Surface runoff I	tration gallery
Status: Sole Prima	ry 🗌 Combined 🗌 Den	nand 🗌 Standby	Seasonal Inactive
System Source Classificat	ion: 🗌 GARP 🗌 GARP-V	ïrus only 🗌 Low risk	groundwater 🗌 Surface Water 🗌 Unknown
Source Assessment Comp	leted: 🗌 Yes 🗌 No		
Global Position (degree de Altitude:	: cimal): ☐ ft	Latitude: Nor Longitude: W	th /est
SOURCE (optional) If there is more than one s	ource, this section will nee	ed to be completed f	or each source
Name:	Address/L	-ocation:	City:
Type: Lake Flowing Piped from approve	Spring Shallow well d source Dugout	Deep well Infi Surface runoff IF	Iltration gallery
Status: Sole Prima	ry 🗌 Combined 🗌 Den	nand 🗌 Standby	Seasonal Inactive
System Source Classificat	ion: 🗌 GARP 🔲 GARP-V	'irus only 🗌 Low risk	groundwater 🗌 Surface Water 🗌 Unknow
Source Assessment Comp	leted: Yes No		
Global Position (degree de Altitude:	ecimal):	Latitude: Nor Longitude: W	th /est



Application for Waterworks Operating Permit Guide

Page 8 of 10

All Sites and Facilities

TREATMENT PLANT (please	complete all relevant fields below)		
Name:	Address/Location:	City:	
Design Flow Rate:			
Treatment Schematic Sketch Example: Back wash 25 µm FILTRATION	Attached: Yes No Pre-filter Granular Activated (min UVT 6% tr Carbon = 80%) Ble (GAC) Fe S μm 1 μm UVT 6% tr NSF 55 Class A UV CHLOF ABSORPTION	o 12% ach ed CONTACT CHAMBER CHECK VALVE (for maintenan and backflow prevention) DISTR	2 min mg/L) STORAGE
Filtration Type: Prefiltration Pressure Reverse C	n Coagulation/Flocculation SI Filtration Cartridge Filtration Microfil Osmosis Setting/Clarifier Flotatio	ow Sand Filtration	tration ation
Smallest Filter/Media Size (n	nicrons):		
Chemical Removal Reason: AO Aesthetic Objective (I)MAC	AO CDWQG List Chemicals MAC/I Both AO and MAC/IMAC List Chemicals (Interim) Max. Acceptable Concentration C	MAC CDWQG List Chemicals	iidelines
Parameters of Concern: Chemical Treatments Proces	ises:		
Primary Disinfection:	nloramination Chlorination Ozonatio	n Chlorine Dioxide Ultraviolet	None
	· · · · · · · · · · · · · · · · · · ·		



Application for Waterworks Operating Permit Guide

Page 9 of 10





Page 10 of 10

	n health Application for Waterworks Operating Permit
the nort	hern way of caring Page 6 of
RESERVOIRS/STORAG will need to be completed	E TANKS (please complete all relevant fields below) - If there is more than one storage this section d for each storage component
Name:	Location:
Type: Elevated Tank	Ground Level Underground Uncovered
Construction Material:	Concrete Fiberglass Aluminum Stainless Steel Epoxy Coated Steel Wood
Construction Date:	28 Volume: 29 Turnover Time: m ³ litres Imp gal5 Turnover Time: hours / days
Security: Covered	Enclosed Hatch is sealed Hatch is locked Vents are screened Security Fencing
Mixing: Yes No	Water Level Indicator: Yes No
Baffled: Yes No	Separate Inlet at Top: Yes No Separate Outlet at Bottom: Yes No
Outflow By: Gravity	Hydropneumatic or Air Pressure Pumping 32 Potable: Yes INO
Free Chlorine readout a	It outlet: Yes No Reservoir Sampling Tap: Yes No
Global Position (degree	e decimal): Latitude: North
Altitude:	ft m Longitude: West
RESERVOIRS/STORAG	E TANKS (please complete all relevant fields below) - If there is more than one storage this section d for each storage component
Name:	Location:
Type: Elevated Tank	Ground Level Underground Uncovered
Construction Material:	Concrete Fiberglass Aluminum Stainless Steel Epoxy Coated Steel Wood
Construction Date:	Volume: Turnover Time:
Security: Covered	Enclosed Hatch is sealed Hatch is locked Vents are screened Security Fencing
Mixing: Yes No	Water Level Indicator: Yes No
Baffled: Yes No	Separate Inlet at Top: Yes No Separate Outlet at Bottom: Yes No
Outflow By: Gravity	Hydropneumatic or Air Pressure Pumping Potable: Yes No
Free Chlorine readout a	at outlet: Yes No Reservoir Sampling Tap: Yes No
The emeral readeure	