



VILLAGE OF CHASE BRITISH COLUMBIA

EMERGENCY RESPONSE PLAN FOR CONTINUED SUPPLY OF SAFE POTABLE DRINKING WATER & WATER FOR FIRE FIGHTING PURPOSES

During a major emergency a command center will be set up at the Water Plant or Public Works Yard, whichever site is the safest. A plan of action and notifications will be determined and put in place to correctly deal with the emergency by the individual who is in charge. Communications must be submitted to all who are involved.

January 29, 2020

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PROTECTING PUBLIC HEALTH

Safe and reliable drinking water is vital to every community. Emergency response planning is an essential part of managing a drinking water system. Most public water systems have had routine operating emergencies such as pipe breaks, pump malfunctions, bacteriological contamination, and power outages. These are manageable if the water system has an emergency response plan that can be put into action. More serious non-routine emergencies may result from intentional acts of vandalism, chemical spills, floods, earthquakes, windstorms, or droughts. These can drastically affect the system and the community that depends on it. Each emergency has unique effects on different parts of a water system. Floods can cause widespread bacterial contamination, earthquakes can damage water sources, distribution systems and treatment systems, and storms can disrupt power supplies. The common element is that each emergency may threaten the system's ability to deliver potable and palatable drinking water. Emergency response planning is a process by which water system managers and staff explore vulnerabilities, make improvements, and establish procedures to follow in an emergency situation. It is also a process that encourages people to form partnerships and get to know one another. Preparing a response plan and practicing it can save lives, prevent illness, enhance system security, minimize property damage, and lessen the overall burden of a catastrophic event and the cost associated to the disaster.

EMERGENCY RESPONSE PLAN MISSION AND GOALS

Mission statement for Emergency Response Plan	In an emergency, the mission of the Village of Chase is to protect the health of customers by being prepared to respond immediately to a variety of events that may result in contamination of the water or disruption of supplying water via floods, storms, earthquakes, and vandalism.
Goal 1	Be able to quickly identify an emergency and initiate a timely and effective response to the situation at hand.
Goal 2	Be able to quickly notify local and regional authorities to assist in the response if utilities cannot respond effectively.
Goal 3	Protect public health by being able to quickly determine if the water is not potable nor palatable to drink or use and being able to immediately notify customers effectively of the situation and advise them of an appropriate protective action plan.
Goal 4	To be able to quickly respond and repair damages to minimize system down time and the potential of illness associated to water quality in the event of a rare emergency.

SYSTEM INFORMATION

Facility Certificate Number	Water Distribution System Facility # 2202 for Water Treatment Plant	
System name and address	Village of Chase Water Treatment/Distribution System 625-Mill Road Chase, BC	
Directions to the system	The Village of Chase is situated at the western end of Little Shuswap Lake, which is within the South Thompson River watershed, which in turn flows into the Fraser River. Chase lies at a transition zone between the wetter Shuswap region to the east and the somewhat more arid Thompson-Kamloops region to the west.	
Basic description and location of system facilities	The raw water is pumped to the WTP from Low Lift Pumps that draw from South Thompson River. The WTP utilizes membrane filtration and sodium hypochlorite disinfection. Treated water is then pumped into the distribution system from the clearwell to the reservoir. The system contains 2 storage reservoirs and two alternate water source consisting of a groundwater well in Mill Park and backup test well.	
Location/Town	Chase, BC	
Population served	2,600 residences	1200 service connections
System owner	Village of Chase	
Name, title & telephone number of person responsible for maintaining and implementing the emergency plan	Sean O'Flaherty Director of Corporate Operations	250-679-3238 Cell: 250-280-2411

WATER SOURCE

Thompson River Surface Water Source

Chase has historically relied on surface water derived from an intake in the South Thompson River. The surface water source infrastructure consists of the Raw Water Pump Station followed by direct membrane filtration, two stage disinfection and treated water pumping at the Water Treatment Plant.

Raw water is diverted from the South Thompson River to the Raw Water Pump Station wet well through a 300 mm diameter intake pipe. The Raw Water Pump Station is on the right-hand side of the River and the approximate location of the submerged intake. The intake pipe has a cylindrical fish screen at a depth of approximately 4 meters below the water surface. Flow from the intake is controlled into the wet well using a slide gate mounted on the inside of the wet well. Two 50Hp vertical turbine pumps (1 duty/1 standby) convey raw water from the wet well to the Water Treatment Plant (WTP) through a dedicated 250/300mm raw water transmission main. Provision for pretreatment chemicals (coagulant and pre-chlorination) is included at the Raw Water Pump Station but not being used currently.

Production Well Groundwater Source

The well is located at the treatment plant site adjacent to Mill Park in Chase. The village's groundwater source was drilled in the fall of 2012 and commissioned in 2014 as part of the overall water system improvement project. The production well installation followed a previous phase of investigation that involved the drilling and testing of a 150 mm (6 inch) diameter test well at Mill Park, as documented in a report by Summit Environmental Consultants (Summit, 2006).

DISTRIBUTION SYSTEM

The Village of Chase water utility serves a population of approximately 2,600, and there are approximately 1,200 service connections. Current (based on 2010) maximum day demand is approximately 75 L/sec with projected future (2033) maximum day demand estimated at 115.7 L/sec. Major components of the water system from source to tap includes the following:

- One (1) surface source – South Thompson River intake;
- One (1) groundwater well (production well) and one backup well (test well);
- Water treatment plant;
- Raw water transmission main from intake pumps station to the water treatment plant;
- 2 storage reservoirs totaling approximately 2,100 m³ of storage; and
- 25 kilometers of distribution piping ranging in diameter from 100 mm to 400 mm.

PRESSURE ZONES

The distribution system is segregated into one pressure zone with 2 storage reservoirs totaling approximately 2,100 m³ of storage.

EVENTS THAT CAUSE EMERGENCIES

The main purpose of this plan is to address a situation where the raw water for the Village of Chase has been contaminated due to an accident on the railway or highway. CPR tracks and the Trans-Canada Highway run parallel with Shuswap Lake, creating risk management concerns. Other possible emergencies considered include:

- Natural disasters
- Accidents
- Deliberate acts of vandalism or terrorism
- System neglect or deferred maintenance

An emergency may affect the entire water system or only isolated sections. Each type of event can cause different types of damage to system components or contamination resulting in a disruption in service. Evaluations should be considered in how to respond to these actions.

NATURAL DISASTERS

EARTHQUAKES

Damage resulting from the earth shifting along geologic faults resulting in shaking and settling of the ground can cause severe structural damage to virtually all water system facilities, including sources, transmission and distribution lines, storage reservoirs, and pump-houses.

FLOODS

Floods can cause widespread contamination as turbid waters carry bacteria that can overflow sources, transmission lines, treatment facilities, and pumping facilities. Floods can also ruin electrical components and telemetry systems. Fortunately, from experience, the drinking water system has not been vulnerable to high flooding.

HIGH WINDS

Every so often high winds occur in the region and they can pose a threat mainly to the power supply.

DROUGHT

Severe droughts have the potential to compromise the water supply network, specifically the Mill Park Wells, which could endure periods of significant reduction in volume late in the summer.

WATERBORNE DISEASES

Organisms such as *Giardia*, *Cryptosporidium*, *E. coli* and viruses can contaminate water supplies and cause waterborne diseases. It is very important to monitor the treatment processes, maintain positive pressure and maintain an adequate disinfection residual throughout the water distribution network to ensure the delivery of safe, potable water.

HUMAN-CAUSED EVENTS:

HUMAN-CAUSED EVENTS THAT CAN RESULT IN A WATER SYSTEM EMERGENCY INCLUDE CHEMICAL SPILLS, VANDALISM, TERRORISM, CYBER-ATTACK, FIRES, CONSTRUCTION ACCIDENTS, AND BASIC NEGLIGENCE OF MAINTAINING THE SYSTEM.

VANDALISM

Vandalism is generally a spur-of-the-moment act using materials at hand rather than pre-planned or pre-meditated activities. Vandals often break into systems, damage facilities, and paint graffiti. These acts are relatively easy to prevent by enhancing security, increasing lighting, installing locks on doors and hatches, and installing and maintaining security fencing.

TERRORISM

Acts of terrorism are conducted by someone whose intent is to instill fear or induce harm to people and facilities. Acts of terrorism are a very real threat. Even though it may seem unlikely, it would only take one well-staged event to undermine confidence in drinking water safety. Being prepared and knowing what to look for are crucial elements of preventing an attack on the system.

There are many potential terrorist threats to drinking water systems, including chemical, biological or radiological contamination as well as damage to infrastructure and computer systems. In most cases, contamination using biological or chemical agents would cause the most concern for a drinking water system. Although it would be difficult to effectively contaminate a large water supply with these agents or cause major damage, the possibility should not be taken lightly. The threat is real and drinking water systems need to enhance security around facilities and be prepared to respond.

SYSTEM NEGLECT

System neglect, often referred to as deferred maintenance, is a significant cause of emergencies. System components that are aging and need replacement go without attention for so long that they fail, causing an emergency. Drinking water systems need to continuously evaluate facilities and replace them before a large-scale failure occurs.

CROSS CONNECTIONS

A cross connection is an actual or potential physical connection between a public water system and any source of non-potable liquid, solid, or gas that could potentially contaminate water supply through a backflow event. Cross connections usually occur unknowingly when someone makes a connection in the system. Backflow is the reverse flow of water or other substances into the public water system. Under backflow conditions, unprotected cross-connections can provide a path for biological, chemical, or physical contaminants to enter the water supply. These contaminants can lead to waterborne disease outbreaks, chemical poisonings, and sometimes death. Backflow usually occurs when there is a loss of pressure somewhere in the system causing water flow to reverse.

CONSTRUCTION INCIDENTS

Construction incidents may fall into the category of an operating emergency e.g. a contractor damages a water line and the system needs to be shut down for repair. If the response is not timely and effective, this kind of incident can turn into a serious emergency. The system may lose pressure, resulting in the potential for backflow incidents to occur that contaminate the water distribution network. The utility must be aware of construction in and around the system and be prepared to respond quickly to an incident if it occurs.

CHEMICAL SPILLS

Many chemicals that are routinely transported can harm humans directly or by contaminating air or water. No drinking water system is safe from a hazardous chemical spill and the resulting contamination. Spills can come from motor vehicles, trains, airplanes, boats, or fixed containers. They can occur at any time without warning.

EMERGENCY SEVERITY

Emergencies usually have a wide range of severity. Defining categories of severity can significantly aid in determining appropriate response actions and notifying correct agencies to assist with the emergency. Knowing the severity of the emergency and being able to communicate it to others will help system personnel keep their response balanced and effective.

Deciding on severity should be collaborative among system personnel with who could be potentially involved with the emergency. The individual in charge may also choose to coordinate with external parties, especially if partnerships have been formed and are part of the ERP contacts. The information for making the decision will progressively increase over time and may result in the level of severity being changed and other actions required.

After an assessment of the severity, the assessment must be communicated immediately to all those dealing with the emergency. Make sure personnel have cell phones and/or radios when they are in the field assisting. Remember to have an alternative method of communicating if cell phones don't work or in a worst-case scenario event. The buddy system should be utilized if personnel power is available.

TYPE I – ROUTINE EMERGENCY

The system experiences a normal emergency, such as a line break or power outage. System personnel can handle the problem with minimal assistance. The situation is not likely to negatively impact public health. Although it is important to begin responding, personnel should have no difficulty remaining calm and work thoroughly through the situation. Normal events can usually be resolved within 24 hours.

Description: The Village of Chase Water System Type 1 Emergencies

- Distribution line breaks
- Short power outages
- Minor mechanical problems in pump-houses
- Other minor situations where it is not likely that public health be affected (Fire hydrant strike)

The system has specific response activities identified for these types of emergencies, including proper sampling, disinfection, and pressure testing activities. System personnel

are advised and are directed to work on the problem and are usually capable of resolving the problem within 24 hours from the first notification. If it is determined the event will last longer than 24 hours and storage is likely to be drawn down below a safe operating level, the situation may be elevated to a Type 2.

TYPE II – MINOR EMERGENCY

The system experiences minor disruption in supply or has indications of possible contamination where it may need to coordinate with Interior Health Authority (IHA) and consider issuing an advisory to customers. In these types of emergencies, health may be jeopardized, so it is important for system personnel to be on alert and initiate a quick response. These emergencies can usually be resolved within 48 - 72 hours.

Description: The Village of Chase Water System Type II Emergencies:

- Disruption in supply such as a transmission main line break, pump failure with a potential for backflow and loss of pressure
- Storage is not adequate to handle disruption in supply
- An initial positive bacteriological sample (E. coli)
- An initial primary chemical contaminant sample
- A minor act of vandalism
- Drought conditions

TYPE III – SIGNIFICANT EMERGENCY

The system experiences significant mechanical or contamination problems where disruption in supply is inevitable and assistance from Interior Health Authority (IHA) is needed. Major emergencies should be reported to Interior Health Authority and Ministry of Environment as soon as possible to determine the best available means of protection. System personnel are directed to the situation and outside agencies are notified to aid in the response. Major emergencies may extend beyond 72 hours before resolution.

Description: The Village of Chase Water System Type III Emergencies:

- A confirmed coliform MCL or E. coli/fecal positive sample, requiring immediate consideration of a boil water advisory notice to customers
- A confirmed sample of another primary contaminant requiring immediate consideration of a boil water advisory notice to customers (ie. Cryptosporidium, Giardia Lamblia, Turbidity)
- A loss or complete malfunction of the Water Treatment Facilities for surface water treatment, including disinfection
- A major line break or other system failure resulting in a water shortage or requiring system shutdown
- An act of vandalism or terrorist threat such as damage to Water System Facilities
- Disinfection system failure

TYPE IV – CATASTROPHIC DISASTER/MAJOR EMERGENCY:

The water system experiences major damage or contamination from a natural disaster, an accident, an act of terrorism, and/or vandalism. These incidents require immediate notification of local law enforcement and local emergency governing services (IHA, MOE, PEP). Immediate notification of Interior Health Authorities is critical to protect public health. These types of emergencies are usually not resolved quickly, depending on circumstances.

Description: The Village of Chase Water System Type IV Emergencies:

- Chemical spill that comes into area of the system's source(s)
- High flood or landslide that infiltrates/contaminates system
- Act of terrorism possibly contaminating the water system with biological or chemical agents
- Storm that significantly damages power grid and system operations

EMERGENCY NOTIFICATION

During most emergencies it will be necessary to notify a variety of government agencies. Type III and Type IV emergencies will require this to be done immediately.

Procedure:	<ul style="list-style-type: none">• Operator in charge will assess the situation and take immediate action.• Notification to Local Authorities (Interior Health)• Operator notifies Village of Chase Management• The water notification will be distributed by:<ol style="list-style-type: none">1. Personnel placing “water notices” on doors and along travel routes2. Personnel will do whatever it takes to notify the community3. The City Administrator will notify local radio station, television and news paper4. Administrative support person will provide pre-scripted message to telephone callers or media and log message that was delivered in a timely basis• Public Works personnel will continuously update The Village of Chase and surrounding community and regulatory agencies on water advisory• Once resolved, notify customers of rescinding notices
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Notification call-out list:

Use the following lists to notify appropriate personnel and agencies during an emergency

MANAGEMENT PERSONNEL				
Title	Name	Home	Office	Cell
Public Works Leadhand	Guy Spencer		250-679-3238	250-280-1190
Utilities Operator 2	John Fandrey	250-604-8310	250-679-3238	250-318-9482
Director of Corporate operations	Sean O’Flaherty		250-679-3238	
Administrative Support & Client Services	Joni Heinrich		250-679-3238	250-320-8419
Chief Financial Officer	Vacant		250-679-3238	
Utility Operator 1	Tyler Magnusson		250-572-1611	250-318-2467
Fire Chief – Fire & Rescue Services	Brian Lauzon		250-220-3032	

Once contacted, Management personnel will assess the situation and if the incident is of a nature that requires a Village of Chase response team, Management will contact waterworks personnel on the following call out list:

WATER WORKS PERSONNEL – TREATMENT/DISTRIBUTION SYSTEM			
Name	Home	Office	Cell
Richard Bastiaansen-(Cloudburst Waterworks) WTP Cheif Operator			250-253-2534
John Fandery-WTP/Utility Operator	250-604-8310	250-679-3238	250-318-9482
Tyler Magnusson-WTP/Utility Operator		250-679-3238	250-572-2411

WATER WORKS PERSONNEL - UTILITY SERVICES			
Name	Home	Cell	
John Fandery	250-604-8310	250-318-9482	
Tyler Magnusson		250-572-1611	

The responding personnel will make the assessment of the situation and notify proper authority and take the necessary steps to correct the situation.

If contamination of water is suspected, in addition to calling management personnel, the following list includes contacts for further potential necessary notification which should be identified by management:

INTERIOR HEALTH AUTHORITY			
Name	Title	Office	Cell
Diana Tesic-Nagalingam	Specialist EHO	250.851.7340	250.320.0501
Emergency After Hours		1.866.457.5648	

PROVINCIAL GOVERNMENT			
Provincial Emergency Program (PEP)			250.832.2424
Ministry of Wildfire and Management Branch			1.800.663.5555
Ministry of Environment			1.800.663.3456
Ministry of Agriculture and Lands			250.387.5121
BC Hydro			1.877.520.1182

HOSPITALS			
Chase and District Health Centre			250.679.3312
Kamloops Royal Inland Hospital			250.372.5111

CHASE FIRE DEPARTMENT			
Name	Title	Home	Office
Brain Lauzon	Fire Chief		250-220-3032

If no fire department member can be contacted call 911 if call already has not been made

Interior Health Emergency Contact Numbers

The following is meant to assist water suppliers to reach their Interior Health representative in the event of a water quality problem as part of their Emergency Response Plan protocol. Please include this information in your Water System Emergency Response Plan.

During Office Hours [8:00 am – 4:30 pm weekdays]

Direct contact:

Diana Tesic- Nagalingam, Specialist Environmental Health Officer

1-250-851-7340 Direct office line or 1-250-320-0501 Cell

If your direct contact is not available our administrative staff will direct your call to the Specialist Environmental Officer covering the area

Please call **1-250-851-7340 [Kamloops office]** & do the following:

- State your name
- Water system
- Contact numbers you can be reached at
- And the fact that this is an emergency call
-

After Hours [after 4:30 pm weekdays/weekends & Statutory Holidays]

- Call the Medical Health Officer on call at 1-866-457-5648

EMERGENCY SERVICES			
			Telephone
Regional Fire Departments			911
BC Ambulance Service			250.828.5888 or 911
Chase RCMP		Daytime	250.679.3238
		After hours	911
Columbia Shuswap Regional District		Daytime	250.832.8194
Shuswap Emergency Program	Co-Ordinator Cliff Doherty		250.832.8194 Cell: 250.833.6556
Canadian Pacific Railway Emergency			1.800.795.7851
Canadian Pacific Railway Police			1.800.716.9132
FortisBC (Natural Gas)			1.800.663.9911
Copper Island Diving Ltd	Paul Downey		250-832-5737
AIM Roads Inc.		1.866.222.4204	778.215.6054
LOCAL MEDIA			
Type	Name	Telephone	
Radio	CHNL	250.372.2292	
Radio			
Television	CFJC	250.372.3322	
Newspaper	Chase Sunflower	250.320.3050	

TRADESMEN			
Company	Name	Telephone	Cell
<i>Plumbing</i>			
Spooner Plumbing			250.679.3373
<i>Electrical</i>			
Centrix Instrumentation	Gordon Jensen		250.550.4737
Spooner Electric			250.679.3373
<i>Excavators</i>			
Shykat Contracting			2503191358

<i>EQUIPMENT SUPPLIERS</i>		
Company	Name	Telephone
Centrix- BG Controls	Dom Sacco	604.942.0288
EMPS	Bob Grantham	250.470.8963
Trojan Technologies	Anders Nielson	1.800.291.0213
Smith Cameron Pump Solutions		1.800.663.5841
Hayward Gordon Ltd		604.986.8464
Mearl's Machine	Greg Anderson	250.763.0109
Wolsely Canada		250.765.5186
Iconix Water Works-Kamloops		250.374.7909

<i>TESTING AGENCIES – ENVIRONMENTAL MONITORING</i>		
Company	Name	Telephone
ALS Environmental Kamloops		250.372.3588

WATER QUALITY SAMPLING

Many types of emergencies can jeopardize the quality of water and adversely affect those using the water. The primary objective for any water system is to protect human health, the system must know how to act quickly and make decisions on whether to issue a health advisory. Sampling and obtaining results from a lab takes time.

If there is reason to believe that the water has been contaminated, the Director of Corporate Operations and/or Chief Operator should consult Interior Health Authorities and consider issuing a health advisory as soon as possible – often before conducting water quality sampling.

Contamination of drinking water, whether intentional or unintentional, comes in many forms, which are classified in four general categories:

- Inorganics such as metals or cyanide
- Organics such as pesticides or volatile compounds
- Radionuclides
- Pathogenic microorganisms or microbial organisms

If the water system is experiencing an emergency caused by a natural event or intentional act and contamination is suspected, system personnel may be faced with making a decision about what contaminants to test for and how to get the tests performed quickly.

If contamination is suspected, Interior Health Authorities should be contacted to assist with the direction as to what testing should be completed. If it is suspected that someone intentionally sabotaged the system or contaminated the water, this may be a crime scene and Interior Health shall be notified immediately as well as the local RCMP Detachment.

Coliform Bacteria: In the event of an emergency, testing for coliform is a standard first test, and if detected it is a signal that the system may be contaminated. Coliform bacteria are organisms that are present in the environment and in the feces of all warm-blooded animals, including humans. Coliform bacteria generally do not cause illness, but their presence indicates that other disease-causing organisms (pathogens) may be present in the water system. Most pathogens that contaminate water supplies come from the feces of humans or animals. Testing drinking water for all possible pathogens is complex, time-consuming, and expensive. Coliform

testing is, however, relatively quick, easy, and inexpensive. Public water systems must test for coliform bacteria regularly as per the GCDWQ.

Heterotrophic Plate Count (HPC): This test provides information regarding the numbers of bacteria that may have been introduced into the water. HPC counts with significant growth require immediate action. Very high levels (1000 – 10,000 and greater) would suggest a problem that needs immediate evaluation.

Chlorine Residual: In chlorinated systems, this test indicates if materials introduced into the water have created a demand for the chlorine, leaving lower-than-normal or no residual and signaling the need for further evaluations. Samples need to be taken at the distal end of the distribution system (the point farthest from the start of the distribution system).

Chlorine Demand: This test reveals unusual demands on the oxidizing capability of the added chlorine, indicating the presence of a contaminant that warrants further investigation.

Total Organic Carbon (TOC): Relatively simple to perform, normal expected levels range from 0.2 to 4.0 mg/L for surface water and 0.01 to 2.0 mg/L for groundwater. Higher levels may indicate the presence of organic materials that could pose a health concern.

Trihalomethanes & Haloacetic Acid (THM & HAA): Disinfection by-products such as Trihalomethanes and Haloacetic acids. High levels suggest that contamination has occurred or that organic materials have been added to enable formation of disinfection by-products.

Cyanide: This test is not easily performed, but should be done immediately if cyanide contamination is suspected. Presence may indicate a source of water pollution that must be traced and eliminated. It may be noted that toxicity is related to pH with a deleterious effect at pH = 6 and can become innocuous at pH > 8 (may be decomposed to carbon dioxide and nitrogen gas). Deterioration of cyanide happens in open streams and further reduction because of bacterial action. Time is the key for the reduction of cyanide. Cyanide is very poisonous. The lungs, gastrointestinal tract and skin absorb cyanide.

Sampling SOP is attached in appendix. Testing agency is listed in contact list.

EFFECTIVE COMMUNICATION

Effective communications are a key element of emergency response.

Developing partnerships with others in your local emergency response network, establishing relationships with our customers and the media, and creating communication tools such as fact sheets and media releases ahead of time will help us communicate efficiently and successfully during a crisis.

All questions and concerns should be directed to the designated spokesperson.

COMMUNICATION TIPS

Do:

- Be prepared
- Designate a spokesperson
- Provide complete, accurate, and timely information
- Tell the truth
- Express empathy
- Acknowledge uncertainty and offer to get back with more information later
- Document your communications

Do not:

- Speculate on the cause or outcome of an incident
- Blame or debate
- Minimize or brush off concerns of customers

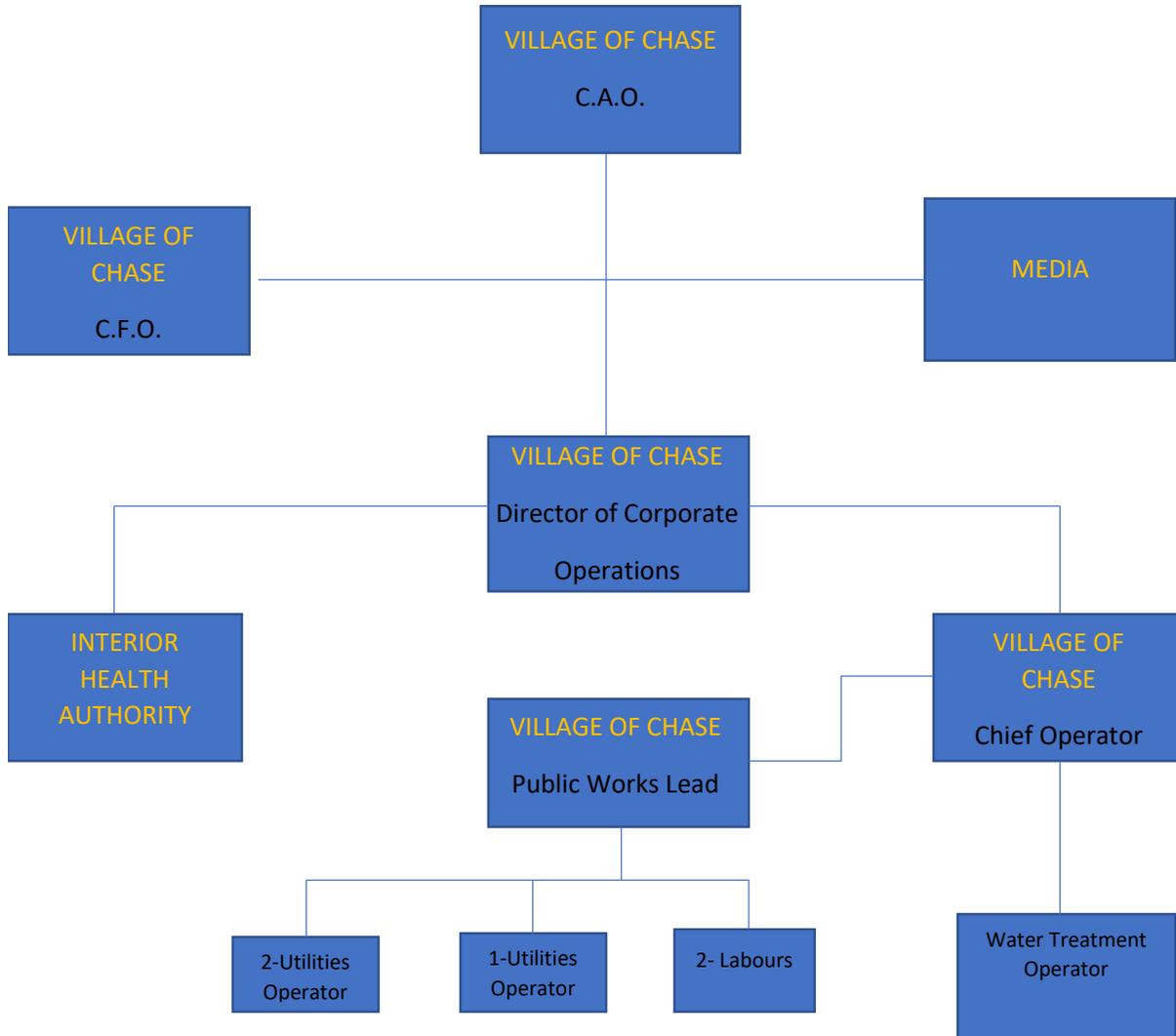
Media Spokesperson	Alternate 1	Alternate 2
City Administrator	Director of Corporate Ops	Public Works Leadhand

KEY MESSAGES

Develop possible messages in advance, and update them as the emergency develops:

- We are taking this incident seriously and doing everything we can to resolve it
- Our primary concern is protecting our customers' health
- Another important concern is keeping the system operational and preventing damage
- What we know right now is_??????????????
- The information we have is incomplete at this time; we will keep you informed as soon as we know more
- We have contacted regional and local authorities to help us respond effectively and to correct the current situation as soon as possible
- If you think you may be ill or need medical advice, contact your local physician or go to the emergency room of the hospital
- We are sampling the water and doing tests to determine whether there is a potential cause of contamination

CHAIN OF CUSTODY



RESPONSIVE ACTIONS

GENERAL

EXTENDED POWER FAILURE – TYPE IV

1. Call Power Company at **1.877.520.1182** to check status and duration of power outage.
2. Contact IHA and Director of Public Works for approval to utilize emergency sources.
3. Flush creek sources and confirm adequate disinfectant residual.
4. Increase flow from creek sources to satellite reservoirs.
5. Adjust PRV operation to allow flow from satellite to primary reservoir.
6. Notify contacts list of the possibility of water shortages if power outage is prolonged.

DISTRIBUTION/WTP COMMUNICATION LOSS FOR EXTENDED PERIOD – TYPE IV

1. Determine if problem is radio or SCADA issue;
2. Call Village of Chase IT Department and Centrix Instrumentation for assistance if problem cannot be rectified by operations;
3. If communication problem persists, call out operations personnel to operate and monitor distribution or Water Treatment Plant manually.

CHEMICAL SPILLS – TYPE IV

AT CITY FACILITY OR WATER PLANT

1. Obtain SDS if possible and report spill (required by law);
2. Contain and prevent spill from entering storm or sanitary sewer by using rubber or clay mats and sandbags;
3. Use proper PPE including appropriate respiratory protection for specific chemical;
4. If possible, neutralize chemicals which are alkaline or acid using spill kit neutralizers.

TRANSPORT CHEMICAL TRUCK SPILL

1. Contain and prevent spill from entering storm or sanitary sewer by using rubber mats or sandbags;
2. By law all chemical spills are to be reported;
3. Use proper PPE and necessary breathing protection for specific chemical;
4. If possible, neutralize chemical which are alkaline or acid using spill kit neutralizers.
- 5.

TRAIN DERAILMENT AND CONTAMINATION

1. Assess damage. If there is a liquid chemical spill, shut down the water intake to the plant and the Seton fan wells. Use contact notification list and get emergency help;
2. If there is a gas leak, evacuate Facilities and use laptop at a safe location to operate facilities.
- 3.

FIRE AT WTP OR DISTRIBUTION BUILDINGS – TYPE IV

1. If fire cannot be contained using a fire extinguisher, evacuate building leaving doors closed and call 911;
2. Once outside take roll call of all contractors, chemical delivery personnel and employees;
3. Open all gate accesses to the plant or facility for fire department.

FOREST FIRE ENCROACHING CITY – TYPE IV

1. Increase all reservoir fill set points and maintain maximum water storage capacity for firefighting;
2. Have emergency sources ready for increased flow capacity including disinfection quantities on hand and enough to last for the duration;
3. Increase manpower to monitor and assist with operation and to work with the fire department's need for volume and increased pressure.

RIVER FLOOD LEVEL – TYPE IV

1. In the event the river level rises above normal conditions at the WTP, there is risk of untreated water entering the clear well;
2. Organize a task force to sandbag and, using polyethylene plastic, seal off WTP;
3. Use a backhoe/loader to move sand around well heads to build a safety dike.

INTRUSION ALARMS – TYPE IV

1. Dispatch will call standby personnel with location of site intrusion alarm;
2. Do a drive-by of location and have dispatch call the RCMP if location is not secure or suspicious activity is observed;
3. Record license plate numbers and description of vehicle and/or individuals if safe to do so. Do not confront individuals. Wait for the RCMP;
4. Thoroughly check area for any possible type of sabotage or vandalism.

WATER TREATMENT PLANT

EXTENDED POWER FAILURE – LOCAL – TYPE IV

1. Call Power Company at **1.877.520.1182** to check status and duration of power outage.
2. Drive to the WTP and verify the backup generator has started and check fuel level.
3. Then proceed to ensure the process of running the groundwater well pump and dedicated UV reactor backup system is operative.
4. Notify contact list of the possibility of water shortages if power outage is prolonged.
5. If power outage is estimated to have a Significant Impact on our Water Supply, then contact IHA to verify the backup emergency plant groundwater production well system and dedicated UV reactor has been initiated.
6. Contact Fuel delivery supplier for the plant generator and schedule accordingly. (Full tank capacity gives approximately 6 days of operation)
7. Ensure key communication between all parties are being regularly updated during the event.
8. Verify post chlorination free chlorine target is being met and adjust as necessary.
9. Document and log raw well totalizer volume, date and time of when the event took place.
10. Make note of any problems that arise and the solution to those problems as well as any procedures or operation that could be improved upon for future incidents.
11. When incident has been resolved and the power is back on, contact all parties to inform them of the update and ensure the Water Treatment Plant system is set to its original settings.

FIRE AT WTP – TYPE IV

1. Call 911. If fire cannot be contained using a fire extinguisher, evacuate building leaving doors closed and;
2. Once outside take roll call of all contractors, chemical delivery personnel and employees;
3. Open all gate accesses to the plant for fire department.

INTRUSION ALARM – LOCAL – TYPE IV

1. Dispatch will call standby personnel with location of intrusion alarm;
2. Do a drive-by of water plant and have dispatch call the RCMP if it is not secure or suspicious activity is observed;
3. Record license plate numbers and description of vehicle and/or individuals if safe to do so. Do not confront individuals. Wait for the RCMP;
4. Thoroughly check plant for any possible type of sabotage or vandalism.

CHEMICAL SPILL – TYPE IV

1. Obtain SDS if possible and report spill (required by law);
2. Contain and prevent spill from entering storm or sanitary sewer by using rubber or clay mats and sandbags; contact personnel to bring out Vacuum Truck;
3. Use proper PPE including appropriate respiratory protection for specific chemical;
4. If possible, neutralize chemicals which are alkaline or acid using spill kit neutralizers.

WATER PLANT LOSS OF SODIUM HYPOCHLORITE GENERATOR- TYPE II

1. There should be sufficient storage in the sodium hypochlorite tanks in SHC tanks to run for several hours. The Emergency eductor post chlorination system can be connected to a pail of 12% sodium hypochlorite which is kept on site for this purpose.
2. Set feed rate by dividing the mg/l by 12. Example: plant was dosing at .90 mg/l divided by 12 =.075 mg/l.
3. The above procedure is only a short-term temporary backup until more 12% sodium hypochlorite can be provided.
4. If problem is deemed to be for an extended period, order an emergency load of 12% sodium hypochlorite carboys from distributor.

LOSS OF CHLORINE RESIDUAL IN CLEARWELL – TYPE II

1. If chlorine residual is 0.5mg/l or less in the clear well, test manually to verify. If residual is still low, shut down high lift pumps and disable start-up. Then proceed to add hypochlorite to clear well manually to achieve desired level.
2. $\frac{\text{Volume of Clearwell (m3)}}{1000} \times \frac{\text{Desired Residual (mg/l)}}{\% \text{ of Hypo (.12)}} = \text{Amount of hypo to add (ml)}$

WATER PLANT UV REACTORS FAILURE – TYPE II

1. Assess nature and cause of problem;
2. Try to rectify problem, call appropriated personnel if needed;
3. Call Public Works Leadhand/Richard Bastiaansen (Cloudburst waterworks) and lead utility operator
4. Call IHA Contact Person and review options;
5. Arrange for alternate drinking water source if necessary;
6. Alert local media requesting public water conservation or Water Quality Advisory notices handed out by assisting water personnel;
7. Do not start up WTP (if at all) until initial communication has been completed with Director of Corporate Operations, IHA, and lead operator;
8. If acceptable with all agencies and WTP is allowed to operate:
 - a. Operate UV valve manually to allow flow of water into clear well;
 - b. Low lift pumps run in manual and controlled from VFD, must be monitored on a continuous basis, adjusting accordingly;
 - c. Ensure hypochlorite is set at 1.2 mg/l for post hypo chlorination to compensate for loss of UV disinfection (DNA destruction of the bacteria);
 - d. Ensure all chemicals are feeding at correct dosages and adjust, watch for filter blinding if chemicals are increased to minimize filter break through;
 - e. Optimize distribution system using groundwater well if time of year permits to decrease WTP flow until issue is resolved;
 - f. Monitor status of plant on a continual basis and work with personnel to rectify problem. Update appropriate agencies every 2 hours on conditions.

WATER PLANT UV REACTORS CRITICAL ALARM – TYPE I- REACTOR SHUTS DOWN BEFORE VALVE CAN CLOSE (50 SEC. DELAY)

1. Assess nature and cause of problem;
2. Try to rectify problem, call appropriate personnel if needed;
3. Monitor Clearwell residuals
4. Note occurrence, time and any particulars in the log

GROUNDWATER WELL

EXTENDED POWER OUTAGE – TYPE IV

1. Contact power company
2. Contact ERP main contacts

DISTRIBUTION SYSTEM

POSITIVE BACTERIOLOGICAL SAMPLE – E. COLI (OVER 1 CFU/100ML) – TYPE II

1. Notification protocol from Village of Chase's Testing Laboratory (ALS) for a positive E.Coli sample is to contact the Director of Corporate Operations, and IHA;
2. Director of Corporate Operations to contact IHA Contact Person to discuss and assess the situation.
3. Director of Corporate Operations to contact water plant staff to test and record chlorine residual from sample site that had the positive.
4. If the residual is acceptable (above 0.25 ppm) resample and send to Village of Chase's Testing Laboratory (ALS)
5. If the residual is below 0.25 ppm flush the mainline until 0.50 ppm is reached and resample;
6. Upon completion of testing for chlorine residual review results with IHA officer, and determine whether emergency notification procedures for E. coli are to be followed;
7. Document test results and details under Water Incident file and determine why positive count occurred, if possible.

POSITIVE BACTERIOLOGICAL SAMPLE – TOTAL COLIFORM PRESENCE – TYPE II

1. Notification protocol from Village of Chase's Testing Laboratory (ALS) for a positive total coliform sample is to contact the Director of Corporate Operations;
2. Director of Corporate Operations to contact IHA Contact Person to discuss and assess the situation.
3. Director of Corporate Operations to contact water plant staff to test and record chlorine residual from sample site that had the positive.
4. If the residual is acceptable (above 0.25 ppm) review with IHA – Contact Person
5. If the residual is below 0.25 ppm flush the mainline until 0.50 ppm is reached and resample;
6. Upon completion of testing for chlorine residual review results with IHA, Contact Person, and determine whether emergency notification procedures for Total Coliform are to be followed;
7. Document test results and details under Water Incident file and determine why positive count occurred, if possible.

LOSS OF RESERVOIR STORAGE – CONTAMINATION – TYPE III

1. If suspected contamination is imminent, isolate reservoir from the distribution system;
2. Ensure isolation from distribution system is complete and take all necessary steps to ensure the integrity of the distribution system is not further compromised;
3. Contact proper authorities (i.e. Director of Corporate Operations, IHA) and assess the situation;
4. Under the guidance of the IHA, notify customers that water is unsafe to use via door to door distribution, media, etc. If homeowners are not home at the time of notification, leave notice at the residences;
5. Notify local fire department that volume of water is decreased (indicate volume that is contained in affected reservoir);
6. After isolation and assessment of reservoir, drain reservoir notifying appropriate agencies depending on the contaminant that is suspected;
7. De-contaminate the reservoir, fill and sample;
8. Put reservoir back online once approved by the IHA (typically upon receipt of satisfactory water quality sample results);
9. Lift all notices distributed to water users.

LOSS OF RESERVOIR STORAGE – STRUCTURE – TYPE III

1. Isolate reservoir from distribution system and assess the area;
2. If required during the assessment, run a pump to maintain positive pressure. Ensure that the distribution system does not increase in pressure but does remain positive within the system;
3. Contact proper authorities (i.e. Director of Corporate Operations, IHA) and assess the situation;
4. Notify local fire department that volume of water is decreased (indicate volume that is contained in affected reservoir);
5. If affected areas lack system capacity, implement Water Conservation Program and notify the affected users by going door to door or through other informational avenues;
2. Upon completion of repairs (as approved by the City Engineer), fill and sample the reservoir;
3. Put reservoir back online once approved by the IHA (typically upon receipt of satisfactory water quality sample results or review by Public Health Engineer);
4. Lift all notices distributed to water users

LOSS OF PRESSURE – PIPE BREAK – TYPE III

1. Identify the cause and location of the loss of pressure in the distribution system;
2. Contact proper authorities (i.e. Director of Corporate Operations, IHA), and assess the situation;
3. Ensure pumps are operating and positive pressure is maintained throughout the system. Ensure the minimum water levels are maintained in the reservoirs to maintain system integrity;
4. Issue a Voluntary Conservation Notice or Mandatory Conservation Notice as deemed necessary following the notification protocol;
5. When problem area is located and repaired, follow AWWA guidelines for disinfection of the water mains and/or reservoirs;
6. Notify water users when system integrity is back to normal, the proper authority has been informed and the test results are in hand.

BACKFLOW CONTAMINATION – TYPE II (POTENTIAL TYPE III)

1. Assess nature and cause of backflow contamination issue;
2. Contact proper authorities (i.e. Director of Corporate Operations, IHA) and assess the situation;
3. Isolate area if possible;
4. Arrange for alternate drinking water source if unable to isolate the affected area;
5. Notify users of potential water contamination. In case of bacteriological contamination, issue a Boil Water Order. In case of chemical or toxic substance, advise accordingly;
6. Make corrections to fix or eliminate the source of contaminant;
7. Once issue is rectified, initiate water flushing and disinfection procedures in distribution system to remove contaminant as required;
8. When safe to do so and permission has been received from the Interior Health Authority, turn water source back on issuing to the consumers “Notice – Drinking Water Problem Corrected”.

PUMP FAILURE – TYPE II

1. Determine if sufficient capacity is still available to supply the water distribution network with standby pump;
2. Change lead and lag remote control on transfer pumps to introduce standby pump;
3. Assess nature and cause of pump problem. If unable to correct, contact appropriate supplier/consultant for assistance;
4. Contact BC Hydro if power failure is cause of pump failure;
5. Notify users of potential water shortage and the need for conservation (if demand is higher than Chase can supply) where total water supply may be insufficient and issue a *Notice for Voluntary Conservation* or *Mandatory Conservation Notice*. In addition, notify the Fire Department that fire flows/storage may be reduced;
6. Once pump failure is corrected put back into service;
7. Contact all affected users and inform them the pump is back on-line, issue *Water System Recovering Notice*.

BROKEN WATERMAIN – TYPE I

1. Isolate break at nearest valves;
2. Determine zone of influence
 - a. If break is limited to a specific area, inform affected users of temporary loss of service or pressure reductions while repairs are being completed
 - b. If break affects overall system, proceed to “Loss of Pressure Response”
3. Repair water main as quickly as possible following the AWWA guidelines for disinfection of water mains;
4. Once repair is completed, initiate water flushing and disinfection procedures in affected water mains;
5. Re-instate main operation after test results received (if any) and contact affected users and issue “Notice – Water System Recovering” if deemed necessary.

PRESSURE REDUCING VALVE FAILURE – TYPE I

1. Assess nature and cause of problem. Manually control system pressure with valves;
2. Determine zone of influence. With a large PRV failure, the small PRV may become the primary source of water supply to users and pressure reductions may occur during peak demand conditions. Notify affected users and, if deemed necessary, issue *Voluntary Conservation Notice* or *Mandatory Conservation Notice* to reduce water consumption;
3. Notify the Fire Department of locations where firefighting flows have been reduced;
4. Once corrected, notify affected users and the Fire Department that the PRV is back in service and issue “*Notice – Water System Recovering*” if deemed necessary.

APPENDIX A - RISK ASSESSMENT

Type of event	Probability or risk (High – Med – Low)	Comments
Earthquake	Low	Never experienced a major earthquake.
Flood	Low	Distribution system as whole is not a vulnerable zone for flooding. The Raw Intake station may be vulnerable if lake becomes high during freshet period and infiltrate into clear wells.
High winds	Med	System may be vulnerable to high wind events. Power can be disrupted for extended periods in certain areas
Drought	Low	Climate change poses an increasing threat to source waters.
Terrorism	Low	Need to be trained on suspicious activity, being prepared is a must.

Construction accident	Low	Construction crews can hit pipes if the locates are not done properly. May lead to system failure because of backflow and contamination.
Chemical spill	High	The probability is low, but the risk is very high due to the severity of the consequences and the paths by which these chemicals are transported. There are currently spill containment systems in place along with an emergency spill kit at the water plant.

APPENDIX B – CONTAMINATION OF SOURCE

Assessment	<p>Shuswap Lake is vulnerable to contamination especially because there is the possibility of a derailment and adjacent rivers and streams that flow into Shuswap Lake. CPR should notify The Village of Chase in the event of an occurrence and where.</p>
Immediate actions	<ol style="list-style-type: none"> 1. Isolate the intake valves, preventing contaminated water entering the WTP and switch over to the groundwater production well for source water supply. 2. Implement water response actions to inform customers to reduce water usage until situation is resolved and initiate the emergency backup groundwater production well for source water. Arrange for alternative drinking water if necessary and initiate water flushing throughout the Village of Chase. Response actions may require personnel to go door to door to deliver the appropriate notices.
Notifications	<ol style="list-style-type: none"> 1. Notify Interior Health (Public Health Officer) 2. Local RCMP Detachment 3. Columbia Shuswap Regional District 4. Notify ALS Analytical Services of increased testing
Follow-up actions	<ol style="list-style-type: none"> 1. Collect water samples 2. Follow Interior Health recommendations

	<ol style="list-style-type: none">3. Return all systems to normal after test confirmed and all is good4. Reporting to Interior Health
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APPENDIX C – ADVISORY NOTICES

Village of Chase

WATER QUALITY ADVISORY

[High Turbidity Levels]

High turbidity levels have been detected in the drinking water supply. High turbidity [cloudiness] levels may occur in surface water sources due to seasonal weather changes causing excessive surface runoff, flooding or lake turnover. A high turbidity level may impair the effectiveness of the disinfection treatment system. If disinfection is impaired, disease-causing microorganisms may escape into the water distribution system resulting in an increased risk of intestinal illness. People with undeveloped immune or severely weakened immune systems, infants and elderly may be at increased risk.

Due to the above concerns and as a precautionary measure, water users are advised to bring all water to a rolling boil for at least one minute and let it cool before using it or, use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth and food preparation until further notice. We will inform you when the Water Quality Advisory is removed.

THIS WATER QUALITY NOTICE IS EFFECTIVE _____ UNTIL FURTHER NOTICE.

ENQUIRIES?

**Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648**

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature: _____

Village of Chase

WATER QUALITY ADVISORY

[Total Coliform Presence]

Laboratory tests indicate the presence of total coliform bacteria in the drinking water. The “total coliforms” may be due to inadequate disinfection treatment or distribution pipes that are in need of maintenance. Total coliform bacteria are naturally present in the environment and they are generally not harmful themselves, but they indicate an increased chance that organisms causing intestinal illness may be present in the drinking water. People with undeveloped immune or severely weakened immune systems, infants and elderly may be at increased risk.

Due to the above concerns and as a precautionary measure, water users are advised to bring all water to a rolling boil for at least one minute and let it cool before using it or, use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth and food preparation until further notice. We will inform you when the Water Quality Advisory is removed.

THIS WATER QUALITY NOTICE IS EFFECTIVE _____ UNTIL FURTHER NOTICE.

ENQUIRIES?

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Signature: _____

Village of Chase

BOIL WATER NOTICE

[Contaminated Water]

Contaminated water has entered the distribution system and we've received reports of people with symptoms typical of waterborne illness. Disease-causing organisms [bacteria, viruses or parasites] may have entered the distribution system. These organisms can cause symptoms such as diarrhea, abdominal cramps, headaches, nausea, vomiting or other symptoms. Boiling the water kill these organisms. People with weakened or undeveloped immune systems are most at risk [this includes; elderly people, pregnant women and their unborn, very young children [under 2], people with AIDS, cancer, diabetes or kidney disease and people being treated with immuno-suppressing medications].

Water users are advised to bring all water to a rolling boil for at least one minute and let it cool before using it or, use bottled water. Boiled or bottled water should be used for drinking, making ice, washing dishes, brushing teeth and food preparation until further notice. We will inform you when you no longer need to boil your water.

THIS BOIL WATER NOTICE IS EFFECTIVE _____ UNTIL FURTHER NOTICE.

ENQUIRIES?

**Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648**

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature: _____

Village of Chase

DRINKING WATER NOTICE

We have recently discovered that an unknown quantity of a chemical contaminant may have entered the water supply system. Water samples are being collected to determine if the water quality meets the standards of the *Guidelines for Canadian Drinking Water Quality*. The chemical contaminant may be at a level that makes our water supply toxic and unfit for drinking or bathing.

As a precautionary measure to avoid health risks, we are advising water users to use bottle water or an alternate source of water for drinking, making ice, washing dishes, brushing teeth, bathing and food preparation until further notice. **BOILING THE WATER WILL NOT MAKE IT SAFE**. If alternate water sources are used, the water must be from Interior Health approved sources only. The water in your hot water tank may also be unsafe. Please consult a qualified plumber before draining your hot water tank.

DO NOT USE WATER NOTICE

IS EFFECTIVE _____ UNTIL FURTHER NOTICE

ENQUIRIES?

Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature: _____

Village of Chase

NOTICE

VOLUNTARY CONSERVATION

As a result of the recent incident involving _____, there is a strong possibility that pumping systems will have to be shut down. All water users are requested to reduce water consumption immediately and to be prepared for a temporary water shortage. It is recommended that you store a small quantity of water for consumption and general household use. As an extra precaution, you may want to disinfect this emergency water supply by adding household chlorine bleach [two drops of bleach to 1 liter of water or 0.5mL bleach to 1 Imperial Gallon/4.55 liter of water] Please ensure that only clean potable water containers are used for storing these emergency supplies.

EFFECTIVE _____ UNTIL FURTHER NOTICE

THANK YOU FOR YOUR PATIENCE AND CO-OPERATION

ENQUIRIES?

**Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648**

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature: _____

Village of Chase

NOTICE

MANDATORY CONSERVATION

As a result of the recent incident involving _____, the main pumping system is not in operation – there is no water entering the distribution system. Please refrain from using faucets and other plumbing fixtures and please use stored water, bottled water or an alternate source of water for domestic purposes. Draining your hot water tank is not recommended unless you have consulted a qualified plumber. If alternate water source are used, the water must be from Interior Health approved sources only.

EFFECTIVE _____ UNTIL FURTHER NOTICE

THANK YOU FOR YOUR PATIENCE AND CO-OPERATION

ENQUIRIES?

Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature: _____

Village of Chase

NOTICE

WATER SYSTEM RECOVERING

The water supply system has been inspected and, where necessary, repairs have been made. All pumping systems are now fully operational. While the system is recovering to normal operating levels, your assistance with conservative water use over the next two or three days would be appreciated. If you have received a *Boil Water Notice* or a *Water Quality Advisory*, please continue to take the necessary precautions until you've seen the *Drinking Water Problem Corrected* notice.

EFFECTIVE _____

THANK YOU FOR YOUR PATIENCE AND CO-OPERATION

ENQUIRIES?

Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature: _____

Village of Chase

NOTICE

DRINKING WATER ISSUE CORRECTED

Water samples collected from our water system indicate that it is no longer necessary to boil water prior to consumption. Chlorine levels will be increased for a short period of time and you may detect a stronger chlorine taste and odor. Chlorine levels will be reduced to normal operating range as soon as possible.

EFFECTIVE _____

THANK YOU FOR YOUR PATIENCE AND CO-OPERATION

ENQUIRIES?

Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature:

Village of Chase

NOTICE

DRINKING WATER ISSUE CORRECTED

The Do Not Use Water Notice is Removed

Water samples collected from our water system indicate that **it is no longer necessary to use bottled water or other alternate sources of drinking water.** We may find it necessary to increase chlorine levels for a short period of time and you may detect a stronger chlorine taste and odor. Chlorine levels will be reduced to normal operating range as soon as possible.

EFFECTIVE _____

THANK YOU FOR YOUR PATIENCE AND CO-OPERATION

ENQUIRIES?

Please call Sean O'Flaherty, Corporate Officer, Village of Chase at
250-679-3238. Interior Health – Drinking Water Officer 250-320-0501
Kamloops Toll Free 1-866-457-5648

PLEASE SPREAD THE WORD TO YOUR NEIGHBOURS

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly [for example: people in apartments, rental units, nursing homes, schools, preschools, churches and businesses]. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Signature: _____