Original 2016 Updated 2021

Ships Point Improvement District

Emergency ReSpsonse Plan - Water

**Rip and Run Sheet**

Incident Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Time \_\_\_\_\_\_\_\_\_\_\_\_\_ am/pm

Incident Type [ ]  Contamination [ ]  Equipment Failure [ ]  Loss of Source

 [ ]  Seismic Event [ ]  Criminal Event [ ]  Other Natural Event

Yes N/A

[ ]  [ ]  Incident Discovered By \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[ ]  [ ]  Incident Commander \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[ ]  [ ]  Emergency Declared By\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[ ]  [ ]  Called SPID Chair Jackie Ainsworth 250.702.6000

[ ]  [ ]  Called SPID Administrator Nina LeBlanc 250.335.0551 or 250.650.3643

[ ]  [ ]  Called DWO at VIHA 1.800.204.6166

[ ]  [ ]  Communication to Users Initiated by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[ ]  [ ]  Communication Method

 [ ]  Email [ ]  Website [ ]  Telephone [ ]  Signage [ ]  Facebook Page

 [ ]  Media [ ]  Door-to door [ ]  Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 [ ]  [ ]  Agencies Contacted

 [ ]  Police [ ]  Provincial Emergency Preparedness [ ]  Ministry of Environment

 [ ]  Department of Fisheries [ ]  Public Health Engineer [ ]  Medical Health Officer

[ ]  [ ]  Arrangements made with Contractors

 [ ]  Well Contractors [ ]  Backhoe [ ]  Electrical [ ]  Plumbing

 [ ]  Pump House [ ]  Control Systems [ ]  Generator / Mechanical

[ ]  [ ]  Arrangements made for Equipment and Supplies

 [ ]  Corix Piping [ ]  Acme Chlorine [ ]  Corix Control Solutions

[ ]  [ ]  Arranged Alternate Water Supplies

 [ ]  Glacier Water Hauling [ ]  H2O 2Go Services [ ]  Lyster Ventures [ ]  Natural Glacier Waters Inc.

NOTES: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Contacts

|  |
| --- |
| **Ships Point Improvement District Emergency Response Plan Contacts** |
|   | ***Name*** | ***Telephone*** | ***Cell*** | ***Email*** |
| **System Operators** | Dave Shepherd | 250-335-0551 |  | dave.shepherd@spid.ca |
|   | Mike Mesford | 25-702-6000 | --- | mike@mesford.com |
|   |   |   |   |   |
| **Fire Chief** | Terry Hoffart | 250.702.5724 | --- | thoffart@telus.net |
| **Emergency Preparedness** | Keith Thibault | 778.427.8858 | 403.594.3171 | ktibo911@gmail.com |
|   |   |   |   |   |
| **Water Technical**  | Bill Trussler | 250.335.0617 | 403.880.5619 | bill.trussler@shaw.ca |
| **Committee** | Bob Timbers |  |  | bltimbers@shaw.ca |
|   | Dave Henderson | 250.702.5724 | --- | dave.henderson@live.ca |
|   | Bruce Prested | --- | --- | bprested@shaw.ca |
|   | Mike Mesford | --- | 250.702.5900 | mike@fannybaypearl.ca |
|   | Jim Wahl | 778.427.6417 | 403.975.6417 | jimwahl@shaw.ca |
|   | Brad Shuya | --- |  | bradleyshuyaarchitect.com |
|  | Dave Shepherd |  |  | dave.shepherd@spid.ca |
|   |   |   |   |   |
| **Electricians** | Dieter Broemer | 250.335.1491 | 250.335.2174 | dbroemer@telus.net |
|  | Novatech | 250.650.2120 | --- | --- |
|   | Raylec - Brad Jackson | 250.400.4266 | --- | --- |
|   |   |   |   |   |
| **Plumbers** | Mark Verclaren | 250.335.0238 | --- | --- |
|   | Union Bay - Dan McGill | --- | 250.218.5127 | --- |
|   |   |   |   |   |
| **Contractors** | --- | --- | --- | --- |
| **Well Contractors** | Ian McGill | 250.703.3785 | --- | --- |
| **Generator/Mechanical** | John Lowe | 250-898-4770 |  | jlaklowe@telus.net |
|   | Simpson Maxwell | 800.374.6766 | --- | info@simmax.com |
| **Backhoe** -small systems | Darren Hutton | 250.703.1086 | --- | --- |
|  " | Rob Sawyer | --- | 250.897.2828 | --- |
|  -regular systems | Stewart Keenan | 250.335.0684 | 250.218.4283 | --- |
|   |   |   |   |   |
| **Bulk Water Haulers** | Glacier Water Hauling | 250.218.6353 | --- | --- |
|  | H2O 2Go Services | 250.337.5049 | --- | --- |
|  | Lyster Ventures | 250.337.5035 | --- | --- |
|  | Natural Glacier Waters | 250.335.9119 | --- | --- |

|  |
| --- |
| **Ships Point Improvement District Emergency Response Plan Contacts** |
|   | ***Name*** | ***Telephone*** | ***Cell*** | ***Email*** |
| **Equipment & Supplies** | Corix Piping | 250.334.3200 | --- | --- |
|  | Corix Control Systems | 604.952.5858 |   |   |
|   | Acme Chlorine | 800.667.2263 | --- | --- |
|   |
| **Trustees** | Jackie Ainsworth | 250.702.6000 | --- | jackie@fannybaypearl.ca |
|   | Bill Trussler | 250.335.0617 | 403.880.5619 | bill.trussler@shaw.ca |
|   | Melina Fakaro | 778-323-9164 |  | thatmelgirl@gmail.com |
|   | Jeanette Reinhardt | 250-335-3262 |  | glenette1@shaw.ca |
|   | Bob Timbers | 250-335-1405 |  | rltimbers@shaw.ca |
|   | Jim Wahl | 778.427.6417 | 403.975.6417 | jimwahl@shaw.ca |
|   | Kevin Gardave | 250.218.6019 | --- | kevingdave@gmail.com |
|   |
| **District Administrator** | Nina LeBlanc | 250.335.0551 | 250.650.3643 | shipspt1@shaw.ca |
|   |
| **Pump House & Control** | Brad Jackson | 250.400.4266 | 250.207.0325 | bjackson@raycyclepower.ca |
| **Systems** | Keith Good | 604.420.1630 | 604.250.1401 | kgood@alliedcontrols.ca |
|   |
| **PROVINCIAL AGENCIES** | --- | --- | --- | --- |
| **Police** | --- | 911 | 250.321.1321 | --- |
| **Medical Health Officer** | Dr. Charmaine Enns | 250.331.8592 | --- | --- |
| **VIHA Emergency Contact** | After Hours | 800.204.6166 | --- | --- |
| **Environmental Health** | Dianne Hulleman | 250.331.8518 | --- | dianne.hulleman@viha.ca |
| **Public Health Engineer** | Murry Sexton | 250.755.6215 | --- | --- |
| **Ministry of Environment** | Coordination Centre | 800.663.3456 | --- | --- |
|  **- Nanimo Office** | Murray Sexton | 250.751.3100 | --- | --- |
| **Prov Emerg Preparedness** | --- | 800.663.3456 | --- | --- |

1. Action Plans for Core Hazards

## CONTAMINATION OF SOURCE

***Actions:***

* Health Unit notifies us or we notify Health Unit
* Boil water advisory after discussing with DWO
* Confirm contamination by retesting
* Shut down pump as advised by DWO
* Notify all users
	+ If Boil Water or Do Not Consume Notices needed, deliver notices door-to-door
* Contact relevant government agencies (see contacts) for advice and assistance
* Contact local media for public service announcement (where required)
* Arrange alternate water source if necessary (see contacts)

***Contacts:***

* Local Health Unit (Environmental Health Department)
* Provincial Emergency Preparedness
* Police,
* Ministry of Environment
* Department of Fisheries
* Others as necessary, depending on severity

## LOSS OF SOURCE

***Actions:***

* Ensure pump is shut off (to protect pump)
* Notify all users
* Contact government agencies (see contacts) for advice and assistance
* Arrange alternate water source

***Contacts:***

* Local Health Unit (Environmental Health Department)
* Ministry of Environment

## FLOOD CONDITIONS

***Actions:***

* Notify all users, door-to-door, regarding the potential for water contamination, loss of pump, power, etc. (Users should be advised to store some drinking water in advance, and to boil any suspect water for two minutes or disinfect with chlorine when flood conditions exist.)
* Phone government contacts (see below).
* Contact local media for public service announcement (for customers that cannot be notified by other means).
* Arrange alternate water source if necessary

***Contacts:***

* Local Health Unit (Environmental Health Department)
* Provincial Emergency Preparedness
* Ministry of Environment

## CHLORINATOR FAILURE

***Actions:***

* Advise local Public Health Office
* Notify all users to boil water for two minutes or take other disinfection procedures in accordance with recommendation of local health officials
* Arrange chlorinator repairs

***Contacts:***

* Local Health Unit (Environmental Health Department)
* Chlorinator supplier

## PUMP FAILURE

***Actions:***

* Notify all users of interruption of service
* Call for repairs: pump manufacturer
* Advise local Public Health office (if interruption not short-term)
* Arrange alternate water source if necessary

***Contacts:***

* Local Health Unit (Environmental Health Department)

## Generator FAILURE

***Actions:***

* Confirm back-up generator is the problem
* Arrange for another back-up generator (600 Volts)
* Notify all users about interruption of service if back up not capable of maintaining supply
* Advise local Public Health office
* Be aware that backflow action plan may need to be implemented
* Arrange alternate water source if necessary

***Contacts:***

* Local Health Unit (Environmental Health Department)
* Simpson Maxwell

## BACKFLOW OR BACK SIPHONAGE

***Actions:***

* Isolate site of problem
* Advise DWO or Medical Health Officer at local Health Unit as needed
* Notify users in accordance with recommendation of local health officials
* Repair break
* Purge and disinfect lines as directed, after corrections have been made
* Arrange alternate water source if necessary

***Contacts:***

* Local Health Unit (Environmental Health Department)
* Water suppliers as needed

## INSIDER SABOTAGE OR VANDALISM

***Actions:***

* Evaluate Damage
* Contact police (see contacts)
* Contact VIHA (see contacts)
* Refer to other plans as required

***Contacts:***

* Police
* Local Health Unit (Environmental Health Department)

Background for this ERP

## Definitions

*Emergency.* An exceptional event that exceeds the capacity of normal resources and organization to cope with it. A water service emergency is a forced water shortage due to inadequate supply, deterioration of quality, or damage and partial isolation of facilities

*Incident.* Any situation with the potential to disrupt essential services, or jeopardize public health and safety

*Response.* Emergency actions taken during both the impact of an incident and the short-term aftermath

## The Ships Point Improvement District Water System

SPID’s water system has a number of components that if damaged, temporarily or permanently disabled, put the entire system at risk and potentially out of operation. The components at risk include:

* Aquifer(s)
* Water wells (1 through 4) (wellheads, downhole equipment and tie-in lines)
* Chlorination system
* Pump house building
* Pump house control systems
* A back-up generator
* Distribution System (mains, valves and control points)

The Wilfred Creek Watershed is assumed to be the water source for SPID’s aquifer. Therefore, it is clear that the board of trustees, now and in the future, has an obligation to the customers of SPID’s water system, to resist any development in or on the Wilfred Creek watershed lands in order to protect the aquifer.

## Schematic: SPID Waterworks (Non-technical, not to Scale)

 Well #1 Well #2

 To pump house

Generator

Chlorination Room

Control Room

 Pump House To pump house

 Well #4

 To pump house

 To distribution System Well #3

## Incident Command Structure

The handling of all types of emergencies, whether their nature is medical, fire, water or otherwise, follows a common protocol. Every emergency is:

* Identified;
* Communicated to an authority;
* Declared;
* Responded to;
* Communicated to the appropriate audience(s); and
* Recovered

A schematic for an emergency protocol follows.

Repair as Needed

No

Identify Incident

Declare Emergency

Call Incident Command

Yes

Communicate to Audiences

Respond as Needed

Note: This process does not preclude immediate action in an emergency.

### Lines of Communication

The lines of communication for water emergencies in the Ships Point Improvement District are from the Water Operator, who is responsible and is in charge for the remedy of the incident. The Water Operator contacts either the Chair of the SPID Board of Trustees or another available Trustee who will in turn contact other persons. External communications will be made in consultation with the Water Operator. For clarity, the Water Operator has full control over all aspects of the emergency until authority has been delegated to others or until control is relinquished to another individual. To remedy an incident, the Water Operator has the authority to involve others on an as needed basis.

## Communications

### BOIL WATER NOTICE

The Ships Point Improvement District, in consultation with the Vancouver Island Health Authority, has issued a boil water notice for the Ships Point Improvement District water system. This notice is effective immediately and covers all Ships Point Improvement District water system customers.

Until further notice, water from the Ships Point Improvement District water system should be held at a rolling boil for two minutes and cooled before it is consumed. For your safety, only boiled or bottled water should be used for drinking, making ice or fountain drinks, washing dishes, brushing teeth, or preparing foods that will not be cooked. [Briefly describe the situation that triggered the notice using one of the following statements and delete the others. If none is appropriate, please consult VIHA for approval of alternate wording prior to issuing the notice:]

\_\_\_ Recent water tests show the presence of unacceptable level of bacteria. Boiling the water will make it safe to drink.

\_\_\_ Turbidity in the water system has risen to unacceptable levels as a result of [heavy rains, mudslide, rapid snowmelt, etc.]. High turbidity can interfere with disinfection and may signal the presence of disease causing organisms. Boiling the water will make it safe to drink.

\_\_\_ The water system recently experienced a [line break/power failure/loss of disinfection/possible source contamination, etc.] which may have made the water unsafe to drink. Boiling the water will make it safe to drink.

For further information contact Ships Point Improvement District at 250.335.0551. Updated information can be found on the community website at www.spid.ca

### REMOVE BOIL WATER NOTICE

Effective \_\_(Date)\_\_\_ the Ships Point Improvement District and the Vancouver Island Health Authority are removing the boil water notice for the users of the Ships Point Improvement District water system. This notice is effective immediately and covers all Ships Point Improvement District water system customers.

Updates will be available through the district website [www.spid.ca](http://www.spid.ca).

### DO NOT CONSUME THE WATER NOTICE

The Ships Point Improvement District, in consultation with the Vancouver Island Health Authority, has issued a do not consume the water notice for the Ships Point Improvement District water system. This notice is effective immediately and covers all Ships Point Improvement District water system customers.

Until further notice, do not drink the water from the Ships Point Improvement District water system. Boiling the water will not make it safe to drink.

The Ships Point Improvement District and the Vancouver Island Health Authority are working together to resolve the situation. Once the water is safe to drink, the do not consume the water notice will be rescinded.

Updates will be available through the district website [www.spid.ca](http://www.spid.ca).

### REMOVAL OF THE DO NOT CONSUME THE WATER NOTICE

Effective \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the Ships Point Improvement District and the Vancouver Island Health Authority are removing the do not consume the water notice for the users of the Ships Point Improvement District water system. This notice is effective immediately and covers all Ships Point Improvement District water system customers.

Updates will be available through the district website [www.spid.ca](http://www.spid.ca).

## Core Hazards

*Alert Conditions.*Considered to be routine emergencies like distribution line breaks, short power outages, and minor mechanical conditions.

*Emergency Conditions.* Considered to be more significant emergencies like disruption of a supply main, complete loss of chlorination equipment system, reservoir carburetion, or water quality degradation due to things like high turbidity, and positive E-coli. These types of issues usually require a Boil Water Notice to protect the public.

*Potential Disaster Conditions.*Situations like potential flooding of the pump house grounds.

*Disaster Conditions.* Emergency situations like a large forest fire within the watershed; landslide, mudslide or hazardous chemical spill in the watershed, or acts of terrorism. These types of emergencies constitute a catastrophic disaster/major emergency which may require immediate notification of law enforcement and local emergency management services. These events often take anywhere from several days to months to resolve before the system returns to normal operation.