

# **EMERGENCY RESPONSE PLAN**

Revised January, 2021

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### EMERGENCY RESPONSE PLAN

#### Introduction

The Drinking Water Protection Act and its Regulations requires that all small water systems have an Emergency Response Plan that can be referred to in case of an emergency that might present a threat to the health of people drawing water from the system. Guidelines for preparing an ERP are provided by the documents EMERGENCY RESPONSE AND CONTINGENCY PLANNING FOR SMALL WATER SYSTEMS produced by the Ministry of Health. A physical risk assessment was completed to ensure that the ERP and mitigation measures were assessed and prioritized.

Scott Point Waterworks District (SPWD) comprises approximately 2 km of 4 inch diameter asbestos-concrete water main to 60 metered residences. Water is obtained from three active wells, each with an associated pumphouse and treatment plant. Water storage is provided by a 56,000 imp gallon water tower and two 5000 gallon storage tanks. Shut-off valves and hydrants are provided at intervals along the main.

Since 2002, SPWD has contracted North Salt Spring Waterworks District (NSSWD) to provide regular operation and maintenance services as well as emergency response for the system.

The main contact for emergencies is NSSWD, who have an emergency phone number and pager. Individual residents may contact one of the Trustees instead of NSSWD. NSSWD has the equipment and knowledge necessary to deal with emergencies.

In the event of a major emergency on Salt Spring Island such as a major fire or earthquake, it is possible that NSSWD may not be able to respond promptly. SPWD Trustees must have a rudimentary knowledge of the system and a response plan for this possibility.

#### **Trustee Duties**

- 1. Ensure the ERP is reviewed annually. New Trustees should be given a copy of the ERP along with pumphouse keys.
- 2. Maintain an accurate Residents Contact List. Note that contact information falls under the protection of privacy protection legislation.
- 3. Annually update themselves on location of Line Valves and valve keys.
- 4. Trustees and residents are NOT trained to respond to most emergency situations:
  - a. Do not attempt to deal with Chlorine
  - b. Never enter a storage tank
  - c. Do not attempt electrical work or plumbing
- 5. Ensure First aid kits and eyewash stations are maintained at each pumphouse



### **HEALTH AND SAFETY PLAN**

### SPWD Policy

The health and safety of the residents, workers, contractors, and the public are of paramount importance. The Scott Point Waterworks District is committed to complying with all applicable laws and regulations, and requires the same of our contractors.

### Potential hazards to residents include:

Contamination of drinking water

Injury resulting from unauthorized entry or improper work on SPWD facilities

#### Potential hazards to workers include:

Chemical exposure to skin and eyes; inhalation of chemicals

Entry into confined spaces with oxygen depletion

Falls from heights while servicing equipment

Electrocution from faulty electrical equipment

Failure of high water pressure containment equipment

Exposure to asbestos when cutting or reaming AC pipe

#### SPWD shall:

Specify appropriate Water Quality Testing Plan. Monitor and report results

Take action for any contamination, including issuing Boil Water Advisory if necessary

Make available MSDS sheets for all chemicals

Provide eye wash stations and first aid kits at each well location

Ensure appropriate safety warnings are posted at all sites

Ensure all facilities have appropriate safety and security protection

#### Contractors shall:

Provide appropriate safety, operations and water quality training for all staff Ensure only properly qualified staff operate and service equipment Adhere to applicable legislation and regulations

#### Workers shall:

Hold regular safety meetings to assess and review hazards of work and job site Immediately report any water quality testing results outside specified limits and breaches of contamination or security at SPWD sites.

Wear personal protection equipment – safety shoes, eye protection, hi-vis clothing Review MSDS sheets before handling any chemicals to understand hazards Use face protection, rubber gloves and rubber apron when handling chemicals Follow NSSWD protocol when handling Asbestos-Concrete pipe Wear fall protection when working at heights



## EMERGENCY RESPONSE PLAN - Jan 2021

### Contact North Salt Spring Waterworks (NSSWD) for ALL emergencies

Office: 250.537.9902 Grant Tamboline: C:250-537-7297 H:250-537-9912 Emergency Pager: 888-777-4054 Vaughn Figueira: C:250-537-7722 H:250-616-3681

SPWD: Rich Ballantyne 250-537-6671, Nigel Smyrl 250-342-1575, Tim Slaney 250-537-6002

NOTE: Residents are not trained in safety procedures. DO NOT attempt electrical or plumbing repairs, handle chlorine, or enter a storage tank or confined space.

#### **Contaminated Drinking Water**

- Report ALL instances of possible water contamination to Island Health.
- Chris Laughlin Office:250-519-3401
- Cell: 250-744-6073
- <u>Emergency</u>: 1.800-204-6166
- See BOIL WATER ADVISORY
- DO NOT OPERATE UNLESS APPROVED

#### **Turbidity**

- If not associated with main flushing, check to see if more than one property is impacted
- Advise residents to flush lines by running tap
- Test for contamination, may need to flush Main

#### Fire

- Call 911
- Shut off Valves connecting affected area
- If it can be done safely, turn off electric supply
- See FIRE PLAN

### **Loss of Source - Well damage**

- Shutdown affected Pumps to protect them
- Reservoir has 4-5 days of supply
- Close Line Valves at affected well
- Arrange alternate source of water if necessary

### **Line Damage or Earthquake**

- Isolate Storage Tank by closing Line Valve 12 or Valve 1A (at Well 1) to preserve water
- Shut down Pumps at all Wells
- Selectively close Line Valves to identify Leaks
- See Boil Water Advisory
- Test for contamination, may need to flush Main

#### Flooding at Well

Shut down well.

- Determine source, divert water to ditch
- Test for contamination from bacteria, nitrates

#### Significant Leak

- Compare meters to last reading to identify any property source. Close affected curb stop
- NSSWD to locate Main leaks using visual methods or specialized tools
- Selectively close Line Valves to identify section
- Do not depressurize Main if it can be avoided
- May result in contamination test before return to service. May need to flush Main

#### Vandalism or Break-in at Well or Treatment Plant

- Call Police
- Contact NSSWD and Island Health for further guidance and actions

#### **Extended Power Failure**

- Monitor Reservoir level which has 4-5 days of supply
- Manually add chlorine into Reservoir as needed to maintain residual
- Arrange for small portable generator and connection by electrician for well pump(s)
- Alternate between wells as necessary

#### **Pandemic**

- Work with VIHA and NSSWD to determine when to implement the <u>PANDEMIC PLAN</u>
- Restrict access to Pumphouses

### **Chemical or Fuel Spill**

- Ensure Fire/Rescue deploys Hazmat protocols
- Shut down impacted well and Main sections
- Flush and test for contamination



### **BOIL WATER ADVISORY**

 Report ALL instances of water contamination to VIHA Environmental Health Officer: <u>Chris Laughlin</u> Ph: 250.519.3401 Cell: 250.744.6073

Emergency: 1.800.204.6166

- 2. Situations that May Require Boil Water Advisory
  - Broken Water Main
  - Chlorination failure
  - Power failure greater than 24 hours

- Backflow or siphonage into water system
- · Flooding at any Well Site
- Earthquake
- Intrusion at pumphouses or tanks

3. Boil Water Advisory

Issued in consultation with Trustees, VIHA Environmental Health Officer and NSSWD.

- Distribute Advisory by Email, Website notice, and Hand-delivery to each residence.
  Consider telephone contact as appropriate
- Water must be HELD at a rolling boil for a minimum of 2 minutes

Advisory can only be cancelled after 2 negative bacteria samples 24 hours apart and upon agreement with VIHA Environmental Health Officer and NSWWD.

- 4. Sample Wording for BOIL WATER ADVISORY
  - Scott Point Waterworks District (SPWD), in consultation with Island Health, has issued a BOIL WATER ADVISORY, effective immediately and until further notice.
  - All residents of Scott Point and users of the SPWD water system (especially those with compromised immune systems) are advised to boil their drinking water for two minutes at a rolling boil.
  - Until the boil water advisory is lifted, all users are asked to minimize non-essential water use. SPWD will NOTIFY users when the problem is resolved.

If you have any questions regarding this notice call one of the Trustees. For updated information on the BOIL WATER ADVISORY, visit www.scottpointwaterworks.com



## PANDEMIC PLAN

- 1. Consult with Island Health and NSSWD to identify when to activate the Pandemic Plan
- 2. Review staffing coverage with NSSWD in the event that operator(s) have fallen ill, are unable to work, or is are a period of quarantine. Operators shall follow NSSWD protocols for worker safety and protection.
- 3. A trustee with EOCP Small Water System operator certification can support NSSWD as necessary.
- 4. Restrict access to Pumphouses and well enclosures to only those people specifically authorized to work on the system.
  - a. No person returning from vacation from any identified zone of infection, or has been exposed to a person identified as being infected may work at any site until they have completed the recommended self-isolation or required quarantine period.
  - b. No person shall work at any SPWD site if they are not feeling well or are exhibiting symptoms consistent with the infection.
  - c. Persons working at any SPWD site should avoid unnecessary off-island travel
- 5. Weekly, or if an operator, trustee, or maintenance worker at a SPWD site has begun exhibiting symptoms, the following procedures shall be put in place:
  - a. all common touch surfaces which include work desks, valve handles, control panels, switches, operation screens, doors and locks shall be washed with soap and water, then disinfected with a bleach solution of 500 mg/L, which is a 1:100 bleach to water dilution (10mL of household 5.25% bleach in 1L of water).
- 6. Operators, trustees, and maintenance workers shall wear appropriate face masks, maintain social distance while on site, and disinfect their hands before entering any SPWD site. Work surfaces shall be wiped down with bleach solution.
- 7. Maintain an inventory of sodium hypochlorite and filters to continue operations if delivery of consumables is interrupted.
- 8. If a continued flow of potable water cannot be ensured, initiated the Boil Water Advisory upon consultation with VIHA and NSSWD.
- 9. Keep residents informed through direct email communication and advisories to check the District website.



## FIRE PLAN

1. Call 911. Identify yourself and location of fire

Well #1 - 377 Scott Point Drive Well #3 - 908 Long Harbour Drive Well #4 - 315 Scott Point Drive

- 2. Contact North Salt Spring Waterworks District Emergency 888-777-4054
- 3. Turn off Pumphouse pumps, but only if it can be done safely DO NOT ENTER A BURNING BUILDING
- 4. If practical, close curb-stop valves, and/or Line Valves to isolate facility VALVE KEYS LOCATED AT EACH PUMP HOUSE
- 5. Contact Residents to deploy Yellow Fire Packs
  - a. Use Fire Packs to deal with travelling embers
  - b. Work under direction of Salt Spring Fire Rescue Yellow Fire Control Packs Located at:

Well #1 - 4 packs

Well #4 – 5 packs

216 SPD - Hodson

145 MC - Sturdy

c. Portable, engine driven, Fire Pumps available at RVYC – 241 SPD



### CONTACT PHONE NUMBERS

Trustees

Rich Ballantyne 250-537-6671 or cell 604-880-1648 Tim Slaney 778-353-2010 or cell 250-537-8002 Nigel Smyrl 250-931-1995 or cell 250-342-1575

Other Residents

David Southwell 250-538-1947 Nick Hodson 250-537-0021 Paul Sturdy 250-538-1944 Peter Ommundsen 250-537-9515 Grant McKay 604-868-0347

Royal Vancouver Yacht Club

Pam Green 250-537-5033

North Saltspring Waterworks District Office 250-537-9902 Emergency Pager 888-777-4054

Ron Stepaniuk 250-537-7693 or home 250-537-2885

Vancouver Island Health Authority Emergency 1-800-204-6166

Chris Laughlin 250-519-3401 or cell 250-744-6073

Lady Minto Hospital 250-537-4800

BC Hydro Emergency 1-888-769-3766

B.C. Provincial Environmental Emergency 1-800-663-3456

Oil Spill Reporting – Coast Guard 1-800-889-8852

**Contractor Resources** 

Water Hauler: Salt Spring Water - 250-538-0102

Excavation: Ken Byron - 250-537-2882 Excavation: George Horel - (250) 537-7671 Plumber: Scott Antonik – Scott's - 250-537-2859 Plumber: Rick Traer – Polaris -250-537-4997

Controls Electrician: Jeremy Warren – White Pacific – (250) 793-2817

Electrician: Scott Cadenhead - FXR - 250-537-4399

Electrician: Andrew Archer - 250 537-2246



