



WATER FACILITY INSPECTION REPORT

Health Protection

Premises Name Savary Shores Improvement District	Tel: (604) 414-8448 Fax:	
Premises Address Savary Shores Savary Island, BC V0N 2G0	Inspection Date May 03, 2024	Time Spent 3 hours
Operator (Person in Charge) Janine Reimer		
Inspection Type Routine		

Observed Violations
There are no observed violations.

Section Details

Comments

Annual Evaluation and Routine Drinking Water System Inspection Report

Prepared by: DWO Jack Davidson

For: Savary Shores Improvement District Water System (SSID).

Operated by: Janine Reimer

System Overview

The SSID water system is sourced from two drilled wells (well #1 - 111 feet / well #2 - 110 feet) drawing water from the main aquifer on Savary Island. The system alternates between wells during operation. Well water is directed to two storage tanks before distribution to 216 connections serving a seasonal population of up to 500 people.

Summary of Issues and Activities:

Updated ERCP and Annual Report for 2023-2024 received by VCH.

Excellent record keeping.

Maintenance procedures are consistently upheld.

Regular flushing protocols in place.

Excellent bacteriological sampling frequency.

SSID completes biannual full spectrum chemical analysis as well as Nitrate testing - Nitrate counts appear to fluctuate and remain below MAC. VCH acknowledges the SSID in their efforts to determine the causes of nitrates and ways to reduce the concentration in the catchment area.

The water system currently lacks treatment measures and relies on the quality and protection of its source water, supplemented by routine bacteriological and chemical sampling. VCH is now placing water systems that do not meet the Health Canada 4-3-2-1-0 treatment objective on permanent water quality advisories.

Although the Groundwater at Risk of Containing Pathogens (GARP) status of the wells is somewhat uncertain, VCH does not currently believe that a permanent water quality advisory is warranted without further consideration, discussion, and review.

In 2017, a wellhead protection plan focusing primarily on nitrate contamination was commissioned. This plan was not a comprehensive level 2 or 3 hydrological investigation as described in the Ministry of Health's 2017 Guidance Document for Determining GARP, but it provided a good risk characterization of the aquifer. Concerns raised by the DWO relate to the unconfined aquifer, the density of sewerage systems within the SSID, and the associated historical challenges with nitrate contamination.

SSID GARP hazards to consider:

- C1: No surface seal on well 1 and the provincial observation well
- D2: Located in an unconfined aquifer
- B4: Located within 300m of a probable source of enteric viral contamination (many sewerage systems and uncharacterized viral transport time)

Page 1 of the 2017 Guidance Document for Determining GARP states: "Contamination may be continuous or, as is more often the case, intermittent. Potential sources of pathogens may include sewage discharge to land, leaking municipal sewage pipes (especially force mains), agricultural waste stockpiles, runoff intrusion into poorly constructed wells, and surface water that is hydraulically connected to groundwater."

Requirements

Actions to be taken include:

- Consider further GARP determination as per provincial guideline.

Action Taken

Information Exchanged

Hazard Rating For Your Facility: Low

DWO

DWO Printed Name Jack Davidson
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