



SUNSHINE COAST REGIONAL DISTRICT

Question and Answers # 1

2537030

Detailed Design and Engineering – Egmont Water Treatment Improvement

Date: November 28, 2025

Item No.1

Question: Please indicate if there have been any water master planning studies for the service area, or identification of any future growth or demands on the system? If these have been completed, please provide them to us.

Answer: Please refer to the Comprehensive Regional Water Plan at the link below:

<https://www.scrd.ca/wp-content/uploads/2023/05/2013-Comprehensive-Regional-Water-Plan.pdf>

Item No.2

Question: Item 3.3.3 –“the design will consider the ability to meet water usage demand, population growth, fire flow requirements...” it is anticipated that any solution will be sized to meet the existing system. Can you please confirm if the Regional District is seeking a water demand growth assessment / summary / report?

Answer: No, the Regional District is not seeking a future growth assessment, we currently do not have a future growth plan or water forecast, we have a fire flow plan forthcoming that may have a small impact on your design, we anticipate that the growth on the coast is approximately around +/-2%.

Item No.3

Question: In the RFP it indicates that the existing system has a filter that is used in the process, can you please clarify where it is located?

Answer: There are two existing cartridge filters inside the WTP, one is 5 micron and the other is 1 micron.

Item No.4

Question: The existing filter, how often is it changed?

Answer: We have a maintenance schedule that is followed, and we monitor flow rates to determine when it needs to be replaced.

Item No.5

Question: Do you have an issue replacing the filter weekly or every two weeks?

Answer: No.

Item No.6

Question: Where is the storage tank located for this facility?

Answer: The water tank is located at the top of the hill which is approx. $\frac{3}{4}$ of a km away.

Item No.7

Question: The existing site is on leased land, do you know if there is any additional space under the existing lease that can be used?

Answer: We have provided a survey of the property boundaries; there is slightly more space up at the reservoir than there is here at the water treatment plant. Any adjustments for additional space under the existing lease would need to have an application submitted and approved by the leaser.

Item No.8

Question: Would you consider a second sea-can or structure within the existing fenced area of the water treatment plant?

Answer: Yes.

Item No.9

Question: Does the existing water treatment plant have adequate power?

Answer: The existing service is a single phase 110/240V, 200Amp.

Item No.10

Question: How much chlorine is stored onsite?

Answer: Two (2) 20L Carboys of 6% chlorine is stored on site. We use approx. 5 carboys a month on site.

Item No.11

Question: Would you be interested in a solution that uses less chlorine?

Answer: Yes, but the solution would need to ensure adequate water treatment throughout the entire span of the waterline.

Item No.12

Question: Can you please confirm if all required meetings / workshops / presentations can be done virtually. It is acknowledged that an in-person presentation may be required at the request of the Regional District at the 90% stage, but it is optional?

Answer: Yes, the meetings can be done virtually; however, it is preferred that the final presentation with the operations team would be in-person, but all the rest could be virtual.

Item No.13

Question: For the in-person meetings do you mean in Egmont?

Answer: The in-person meeting for the final presentation would be held in Sechelt at one (1) of our two (2) locations)

Item No.14

Question: Can you please confirm if the existing SCADA communication infrastructure is acceptable for this site?

Answer: The existing SCADA communication does have some issues, which may be largely due to the location of the site. The cell signal can be intermittent, and potential solutions should be explored as options in conceptual design. Communication between the reservoir and the treatment plant is currently done by Banner wireless I/O, which can also fail intermittently. Options for having a more reliable level measurement and communication from the reservoir to the treatment plant is something that should be explored in conceptual design.

The SCADA Master plan will be provided to the Contractor upon award. Here are the SCADA standardized components:

Equipment	Manufacturer	Model	Notes
Cell Modem	Sierra	Sierra RV50X modem + poyntnig a-puck-2-V2-01 Antenna	
PCL's	Allen Bradley (Rockwell Platform)	CompactLogix 5380 Range	Putting a instance of VT SCADA at sites
HMI's			
Actuators	Rotork	IQ	
VFD	ABB		Radar
Transmitters Level	Vega		
Transmitters Flow	Siemens		
UV	Trojan		
Chlroinnation	HACH		
Turbidity	HACH		
pH	HACH		
Firewall	Netgate +pfSense	NetGate SG-1100 + SG-210 running pdSense	
Satellite Communication	Starlink		
Chemical Pumps	Grundfos		
UPS (non rack)	Hub Carbon. Victron Components		Hub Carbon Batteries, Victron Chargers, inverters, battery

			protect, converters	12/24v
UPS Rack	APC			
Alarm Dialler	Protelk	Cc3	Non SCADA Sites	
SCADA	VT SCADA			
IoT Device	Signalfire Ranger			

Item No.15

Question: Item 3.1 Project Objectives refers to “necessary improvements to the Egmont Water Treatment Facility... Treated water quality meet or exceeds applicable regulatory requirements.” And item 2.1 Purpose refers to “improve the treatment process and treated water quality.” What effort is expected towards comments further in the report regards to fire flow and water uses demands.

Answer: Our project objective is to improve the water quality. The solution will meet the regulatory requirements and meet or exceed existing supply capacity.

Item No.16

Question: For the sites SCADA Communication is it hardwired to the reservoir? Float switch or electronic switch for capacity.

Answer: Please see Appendix 3 As-Built Drawings this document show controls schematics.

Item No.17

Question: Do you have any original Design Drawings or engineered design drawings?

Answer: We only have the OPUS stamped set, the only meaningful to change was an intake for improvement to the system.

Item No.18

Question: Have you tried to reduce chlorine dosage to address the filtration process

Answer: We have considered that but by the water time gets to another end of the line we need to ensure that there is adequate residual at the end of the line.

Item No.19

Question: Are there any users connected to the water treatment plant and between the reservoir?

Answer: No, everyone is connected to the system after the reservoir.

Item No.20

Question: The report from KWL provided with the RFP provides parameters for when the Regional District should be taking tests of the water quality. Have you been taking those tests and can we have the test results this will help us determine disinfection byproduct solutions?

Answer: The Regional District routinely takes tests of this site, generally at the frequency recommended in the report above. Please see Amendment no 1 with the rest results.

Item No.21

Question: Has the Regional District tested the system for DBPs since the new intake was installed?

Answer: Yes.

Item No.22

Question: Item 5.1.2 b) professional survey. Please confirm if the Regional District Requires a BCLS to be part of the initial project team?

Answer: No, a surveyor would be required to be obtained if we are making changes to the existing permanent foundations or property boundaries.

Item No.23

Question: When would we require a tree survey, would it be required if we are working in areas within the legal boundaries of the water treatment plant and reservoir?

Answer: A tree survey would be required if we are impacting areas outside the existing site and/or if trees within the site need to be removed.

Item No.24

Question: Would tree removal be supported by the Regional District?

Answer: Tree removal would be considered, before any trees are removed consultation with shíshálh Nation, archaeology would be required. The Regional District would coordinate with the shíshálh Nation and archaeology. The Contractor would be required to complete the paperwork and fill out all the forms for this request

Item No.25

Question: is the conveyance and capacity of the system ok?

Answer: Yes, the existing capacity is acceptable, we expect that in the final design that there will be an allowance for future water capacity.

Item No.26

Question: What kind of life span do you want to obtain out of this upgrade?

Answer: Average life span would be 35 years; 50 years on structure, 20 years on mechanical

Item No.27

Question: What length of time should we account for in population growth for our forecast?

Answer: 35 years is preferred.

Item No.28

Question: What is the funding source and the budget for this project?

Answer: User fees and Capital Reserves. Total of \$200,000 was approved in 2023 for the design.

Item No.29

Question: Would you consider a hot water on demand system inside the facility?

Answer: We do not have any preference, whatever is proposed will need to meet safety standards.

Item No.30

Question: Do you anticipate any geotechnical work or concerns?

Answer: That depend on the Contractors solution for the sites, we do not have any geotechnical data for the site. If there is a new structure, or especially if the structures extend outside the existing fenced area the Contractor would be required to complete a geotechnical report.

Item No.31

Question: How long has the existing reservoir been in operation??

Answer: Approx 15 years.

Item No.32

Question: When did you first realize that there was an issue with the water system?

Answer: It has been a few years, please look at the lab test results and you will be able to see the patterns and identify when issues commenced.

Item No.33

Question: Do you notice if the water quality fluctuation is based on seasonal impacts?

Answer: The water quality is affected all year round but also faces seasonal impacts

Item No.34

Question: How do you protect the water source from contamination?

Answer: Our bylaw states no power boats in the lake.

Item No.34

Question: Can you please confirm the Regional District fire flow objectives for this system in L/sec?

Answer: 90 L/Sec to meet fire flow objectives.

Item No.35

Question: Can you please provide the land files / easements / row documents for the pump station, treatment plant and reservoir?

Answer: Please see amendment no.1