

Cowichan Valley Regional District |November 16, 2016

Arbutus Ridge Wastewater System Upgrade Project

What is the Concern?



The central problem is the disposal fields have failed and effluent is surfacing on the ground

Why is this a concern? Public Health Out of Compliance with the Ministry of **Environment Permit** Environmental Contamination

What has Been Done to Date?



Investigation of the Disposal Fields



Hot water, high pressure cleaning of the disposal field pipes



Preparation of a report outlining the possible options to repair the problem and estimated costs

What are the Options?

OPTION A. REPLACE THE EXISTING DISPERSAL PIPE TRENCHES

- This work may be completed under the current operating permit with the Ministry of Environment
- Requires purchasing land to allocate for a standby field as the original land designated for the standby field is now disposal field 2
- The existing treatment infrastructure would need eventual replacement

OPTION B. REPLACE THE EXISTING TREATMENT INFASTRUCTURE WITH EXISTING TECHNOLOGY AND ADD COMPONENTS CAPABLE OF PRODUCING CLASS A EFFLUENT

- Replace the existing disposal field with a smaller field (possible because of the cleaner effluent generated by the treatment plant)
- Move from the existing Permit to Registration with the Ministry of Environment (additional expense associated with this)

OPTION C. REPLACE THE EXISTING TREATMENT INFASTRUCTURE WITH NEW TECHNOLOGY CAPABLE OF PRODUCING CLASS A EFFLUENT

- Replace the existing disposal field with a smaller field (possible because of the cleaner effluent generated by the treatment plant)
- Move from the existing Permit to Registration with the Ministry of Environment (additional expense)
- Have the option of using the treated effluent as irrigation on the golf course

What is the Recommended Option?

OPTION C. REPLACE THE EXISTING TREATMENT INFASTRUCTURE WITH NEW TECHNOLOGY CAPABLE OF PRODUCING CLASS A EFFLUENT

- Replace the existing disposal field with a smaller field (possible because of the cleaner effluent generated by the treatment plant)
- Move from the existing Permit to Registration with the Ministry of Environment (additional expense)
- Have the option of using the treated effluent as irrigation on the golf course

Why Option C?

The CVRD worked closely with the Civil Works Committee and have kept the members well informed of the progress

Together, with the Civil Works Committee, Option C was identified as providing the best, long-term, sustainable solution.

The high quality effluent will result in a smaller footprint requirement for the disposal field -eliminating the requirement to secure a reserve field (apart from the already existing)

- the high quality effluent will mean a longer lifespan for the disposal field.

How Much will it Cost?

Replace one of the existing disposal fields with new dispersal pipe (the other disposal field would be kept as a reserve field)

Replace existing treatment plant with new technology capable of producing Class A effluent

Have the option of using the treated sewage for use as irrigation water on the golf course (additional \$300,000)

\$2,450,000 (class C estimate, net cost)





What will be the Cost to each Customer?





The CVRD will prepare and send out a letter to all the residents of Arbutus Ridge that will summarize the project and ask for any feedback from the community. Completed, very little feedback received



An Engineering Firm will be engaged to prepare a Class C estimate for Option C. This will provide a more detailed cost estimate of the project

Completed, \$2,450,000 is Class C cost estimate



Questions?