



**DISTRICT OF HUDSON'S HOPE**  
**AGENDA – SPECIAL COUNCIL MEETING**

Council Chambers

Thursday, January 26, 2023, 4:15pm

**1. Call to Order:**

***THAT** Council waive Public Notice for the Special Meeting of Council being held at 5:00 pm, Thursday, January 26, 2023 pursuant to section 127(4) Community Charter for the purpose of discussing an urgent matter pertaining to the Water Treatment Plant.*

**Section 127(4), Community Charter - Notice of Council Meetings**

*Notice of a special council meeting may be waived by unanimous vote of all council members.*

**2. Staff Report:**

SR1 Water Treatment Plant – Change Order

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**3. Adjournment**

## REQUEST FOR DECISION

RFD#: <b>2023-MR-05</b>	Date: <b>January 26, 2023</b>
Meeting#: <b>SCM-01-26-23</b>	Originator: <b>Mokles Rahman</b>
<b>RFD TITLE: Water Treatment Plant (Ph-1) – Change Order</b>	

**RECOMMENDATIONS:**

***THAT** Council approve \$52,334.35 as a change order to the Clear Blue Water Systems Contract to include provision for the supply and installation of new media and to clean all accumulated biological film (bio-film) in both the Cistern and the Media Filtration Units. This emergent condition is a result of ongoing biological growth in the water treatment plant from extended use of the well water system, and*

***THAT** Council authorize the administration to execute the change order of the Clear Blue Water Systems contract.*

**BACKGROUND:**

Due to unforeseen circumstances and delays in approvals, work to convert the water treatment plant from treating well water to surface water did not commence until Jan 16, 2023. During this time the District was placed on a “Boil Water Advisory due to the “bio-fouling” of the media filters on December 28, 2022. It was believed at that time that emergency shock chlorination and cleaning would have brought the filters to a reasonable level of service to start “running” the river water through these filters and determine their efficacy.

Since that time, the evidence of the quantity of “bio-film” in the aeration tower, cistern and media filters leads to the conclusion that the media should be replaced prior to running the surface water through the new treatment plant, and another month of running well water through the plant has occurred. This will alleviate the risk of propagating the bio-film substance past the media filters and into the 1-micron cartridge filters, rendering them plugged and requiring frequent changes. There is a limited supply of these filters and they are expensive to replace.

The quoted price for the cleaning and media change from Clear Blue is conservatively estimated to be \$52,334.35, which includes a full week of labour, though the work is expected to be completed in approximately 3 days. Thus, there is contingency built-in to the pricing.

As shown below, the District has approved the following budget to accomplish the conversion, including \$77,011.16 contingency, and the quoted work to clean and install new media is likely to fit within the given contingency, though it is recommended to approve this work as a separate budget and hold the contingency if required for other work, not yet foreseen.

DoHH Water Treatment Plant Conversion Project: Budget Summary				
Date	Consultant / Contractor	Scope or Change	Base Price	Contingency
November 7, 2022	McElhanney	Engineering Phs 1 - Plant Conversion	\$ 46,494.00	
	Clear Blue Water Systems		\$ 169,522.15	
	Epscan Industries		\$ 99,996.04	
				\$ 37,921.46
December 12, 2022	McElhanney	Engineer Phs 2 - UV Units	\$ 76,328.00	
	Clear Blue Water Systems	Supply and Install UV Units - Phase 2	\$ 220,544.50	
	Delco Automation	1-Micron Filters and Preservative	\$ 28,875.00	
				\$ 39,089.70
January 4, 2023	Change Order Issued	Additional Costs for Crane Lift and		
	Clear Blue Water Systems	Safety Stairs	\$ 164,777.75	
				\$ -
Approved Budget			\$ 806,537.44	\$ 77,011.16

**DISCUSSION:**

The work to clean the cistern and change the media filtration materials (Gravel and NextSand) is unexpected but necessary. The surface water does not contain the same biological activity as the well water, and the design of the conversion includes the application of chlorine before the new media filters, which will control any biological activity through the plant as the surface water is treated, and the media should last for the duration of the temporary conversion time, which is expected to be one or two years.

**FINANCIAL CONSIDERATIONS:**

The total cost of the project up to Ph-2 is \$935,882.95 plus GST including \$52,334.35 contingency. The cost proposal will be presented to BC Hydro after Council approval. The administration will recoup these costs from BC Hydro.

Prepared by:

Mokles Rahman, CAO

# Clear Blue Water Systems Ltd.

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Montney, BC  
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www.clearbluewaterystems.ca

January 22nd, 2023

Jane Price BAsc., EIT  
McElhanney  
8808 Northern Lights Drive  
Fort St John, BC  
V1J 6M2

## Re: Estimate to Shock Chlorinate Cistern ,Clean & Rebed Media Filters with Nexsand Media & Filter Gravel Media at Water Treatment Hub, District of Hudson's Hope, BC

### Scope of Work

Mob from Hudson's Hope to Fort St. John to pick up materials and equipment with picker and pick up/trailer to deliver back to Hudson's Hope and off load.

Remove sand & media, clean, sanitize and rebed filter tanks with new Nexsand media and gravel.

Demob to base.

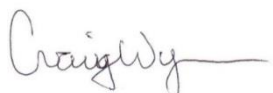
### Pricing

168 cu. ft. Nexsand media at 79.85 p/bag	13414.80
112 bags 1/4 x 8 NSF certified filter gravel at 29.65 per 55 lb bag	3320.80
Scissor lift rental at 675.00 per week for 1 week	675.00
5 days, est., Hotsy rental at 175.00 per day	875.00
1 pail 12% Chlorine at 148.75 per pail	148.75
10 hrs, est., picker truck & operator at 2.05 p/hr	2050.00
7 days, est., daily truck & trailer charge at 375.00 per day	2625.00
4 nights (5 days), est., LOA x 3 man crew at 300.00 p/man, p/night	3600.00
1 day, est. per diem x 3 man crew at 75.00 p/day	225.00
40 hours labor, est., 3 man crew at 330.00 p/hr	13200.00
10 hours OT labor, est., at 495.00 p/hr	4950.00
Heavy Materials freight charges (2 shipments)	7250.00
Sub Total	<u>\$52,334.35</u>

Applicable tax will be calculated upon invoicing.

Should you have any enquiries regarding the above quotation, please do not hesitate to contact me.

Regards,



Operations Manager  
Clear Blue Water Systems Ltd.

***"Clean Water - Clear Choice"***