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PUBLIC NOTICE

PREVENTATIVE BOIL WATER ADVISORY UPDATE

Standard Procedure for the New Water Treatment Plant

In order to complete the transfer to the new water treatment plant in Chisasibi, a **BOIL WATER ADVISORY** must be issued for 30 days. This is a normal procedure that is required for the final testing of the water treatment plant. A **PREVENTATIVE BOIL WATER ADVISORY** is only issued as a **PRECAUTIONARY** measure. For more information on the water performance test, feel free to read the attached additional documents. **Therefore**, the current **BOIL WATER ADVISORY** will remain in effect until **August 11, 2024**.

BOIL WATER ADVISORY DATES

Start date: July 10, 2024

End date: August 11, 2024

We ask community members and residents to follow the preventative boil water advisory.

We thank you for your continued understanding and patience.

A message from Public Works Department
July 11, 2024



Performance Test Plan

For the Cree Nation of Chisasibi Chisasibi Drinking Water Treatment Plant

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A	Initial Creation	DM				29-FEB-2024		
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5 Methodology

5.1 Test Setup and Operation

As outlined in **Section 3**, in order to demonstrate the membrane system capacity, the plant demand will be set to the maximum design capacity, or as close to it as allowed by the capacity of upstream and downstream systems. All trains will operate in automatic demand mode with an automatic flow set point corresponding to the demand.

The membrane system is expected to run continuously, contingent on the availability of feed water, the capacity of the downstream disinfection system, clear wells, and the demand from the distribution system. If the membrane system demand is set lower than the maximum membrane system capacity to accommodate the demand of upstream and downstream systems, the Performance Test will be considered successful provided that the membrane trains deliver water at their selected setpoint whenever there is demand for water. At lower flows to the membrane plant, a reduced number of trains can be operated. It is expected that that there is demand for at least one (1) train for the entire duration of the Performance Test.

To meet the objectives of the Performance Test, the membrane trains will be set up as noted in **Table 3**. The operating conditions described in the table should not be altered during the Performance Test, unless agreed to by all parties prior to any modification.

Table 3: System Operating Parameters for Performance Test

Parameter	Value
Membrane Filtration System Parameters	
Plant Flow Rate	Maximum Plant Demand or as set by plant operators
Train Flow Rate	Train flow setpoints automatically calculated by the PLC
Production TMP Alarm Setpoint	83 kPa
Recovery	95% ^{Note 1}
Membrane Integrity Testing	
Frequency	Daily
Test Pressure	75.8 kPa or 11 psi
Alarm Condition	4.0 log
Maintenance Cleaning	
Maintenance Clean Frequency	1 per day per train
Heated Water Requirement	Maintenance Cleans are unheated
Chlorine Maintenance Clean (Frequency and Chemical Concentration)	6 times per week 100 mg/L

Parameter	Value
Acid Maintenance Clean (Frequency and Chemical Concentration)	1 time per week 1000 mg/L citric acid ~250 mg/L HCl (for pH adjustment to 2.1)

Note 1: During the Performance Test the membrane system recovery will be greater than or equal to the minimal contractual requirement of 95%. The membrane system recovery can be achieved during steady state operation over the course of a 24-hour period and may be affected by repeated standby events. The membrane system recovery is to be met at the design capacity. Operation under low flow scenarios increases the proportion of chemical waste over backwash waste, which under certain conditions may impact the ability of the system to meet its recovery setpoint.

5.2 Schedule

The Performance Test can begin once the Preparation for Testing as described in **Section 4** has been completed and all parties have agreed to this Performance Test Plan and the start date.

As per the Contract Documents, the Performance Test duration is four (4) weeks.

5.3 Test Procedure

The Performance Test will be executed as follows:

1. Confirm who will be responsible to complete the activities listed as "by Others" under Preparation for Testing (Section 4).
2. Complete all activities described under Preparation for Testing (**Section 4**). The pre-treatment system shall remain optimized through the entire Performance Test duration. This includes operating at a coagulant dose that is appropriate based on the feed water quality over the duration of the Performance Test.
3. Confirm the Performance Test start date with the entire project team.
4. Confirm the plan for the pre-Performance Test and for the weekly raw water characterization by Others.
5. Setup the membrane system to run as per **Table 3** under Test Setup and Operation (**Section 5.1**).
6. Start the Performance Test on the agreed-upon start date.
7. Designated operating staff shall operate and maintain the pre-treatment and membrane systems prior to and throughout the Performance Test.
8. Monitor the equipment and sample water as described under Data Collection (**Section 5.5**).



Appendix A

Table 4. Water characterization results before and during Performance Test Plan.

Parameter	Before Performance Test Plan	Week 1	Week 2	Week 3	Week 4
Alkalinity					
Total Hardness					
pH					
Temperature					
Total Organic Carbon (TOC)					
Dissolved Organic Carbon (DOC)					
Apparent Color					
UV Absorbance					
Turbidity					
Dissolved Solids					
Total Solids					
Calcium					
Magnesium					
Barium					
Strontium					
Total Iron					
Dissolved Iron					
Sulfate					
Total Aluminum					
Dissolved Aluminum					
Total Manganese					
Dissolved Manganese					
Total Silica (SiO ₂)					
Langelier Saturation Index (LSI)					