



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

Your file - Votre référence
2AM-WTP1826

January 7, 2019

Our file - Notre référence
CIDM#1236856

Richard Dwyer
Manager of Licensing
Nunavut Water Board
Gjoa Haven, NU X0B 1J0

Sent via email: licensing@nwb-oen.ca

Re: 2AM-WTP1826 O&M Arsenic Water Treatment Plant

Dear Mr. Dwyer,

Thank you for the email notice, received on November 30, 2018, regarding the above-noted operation and maintenance (O&M) manual.

CIRNAC reviewed the manual, pursuant to its mandated responsibilities from the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*, and would like to provide the following comment and recommendation to the NWB for consideration.

AEM prepared this O&M manual in accordance with the "*Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories, 1996*," which requires that "*the O&M manual must include a description of how facilities are operated and maintained, how often these tasks are performed and who is responsible for their completion.*" CIRNAC notes, however, that the O&M manual contains only a summary of the operational and maintenance procedures but not an adequate instruction on how the facilities will be operated and maintained for the plant operators to follow. For example, with regard to effluent quality control, section 3.4 of the O&M manual states that "*the Operator will conduct regular inspections of the entire operating system to ensure it operates as intended. Any upset condition will be reported immediately by the Operator and corrective actions will be applied accordingly. The Operator will also record process key values that will allow the process to be optimized and any discrepancies between the process and expected performances to be detected.*" It is not clear, for example, how frequent the entire operating system will need to be inspected by the operator; which areas or aspects of the system will be inspected; what will be considered as an upset condition; whom the operator will report to when an upset condition occurs; who will be responsible for carrying out the corrective actions; and what are the process key values to be recorded by the operator.





CIRNAC recommends that the O&M manual be revised to include a step-by-step instruction on the routine operational and maintenance procedures for the plant operators to follow.

CIRNAC appreciates the opportunity to participate in this review and looks forward to working with AEM and the NWB. If you have any questions or require any further information with respect to this matter, please contact me at (867) 975-4555 or email david.zhong@canada.ca, or Ian Parsons at (867) 222-9278 or email ian.parsons@canada.ca.

Regards,

David Zhong
Regulatory & Science Advisor, Water Resource Division