



**Vermilion Bay Water Treatment & Distribution Systems**

**Problem:**                   **Contaminated Raw Water Source  
(Microbiological Parameter)**

**Contact Info:**           Overall Responsible Operator (ORO), Operator-In-Charge  
(OIC), Ministry of the Environment - Abatement Officer,  
Ministry of the Environment - Drinking Water Inspector,  
Municipality of Machin

- Procedures:**
1. Immediately turn off and lock-out the low lift (raw water) pumps in the water treatment plant.
  2. Contact the Operations Manager, ORO and OIC. These people will assist you in determining the severity of contamination and whether or not the treatment facility is capable of removing enough of the contaminant to provide the community with safe drinking water.
  3. Collect raw water samples and send to an accredited laboratory for analysis.
  4. Collect treated and distribution water samples and send to an accredited laboratory for analysis.
  5. Notify the Ministry of the Environment Abatement Officer and, if applicable, assist him/her in determining the cause of contamination.
  6. Notify the Ministry of the Environment Drinking Water Inspector if any significant deterioration in drinking water quality would result from resuming treatment plant production. He/she must give approval before resuming plant production and will likely determine the frequency at which samples are to be collected for monitoring purposes. He/she will also inform you whether or not the Health Officer (MOH) should be notified. If contaminant levels in any treated or distribution samples exceed microbiological standards as determined by provincial regulations (O. Reg. 169/03), refer to the appropriate contingency for Adverse Water Quality.



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7. Notify the Owner of the system and ensure that the Owner is kept up-to-date as events progress.
8. In the event of severe microbiological contamination of the raw water, an operator may consider pre-chlorination on a short term basis as an added barrier against contamination of treated water supplies and treatment equipment. Steps will need to be taken to ensure that treatment processes (flocculation and filter tanks) do not become mediums in which bacteria may proliferate. Periods of severe raw water contamination should be followed by the disinfecting of water treatment equipment (as per ANSI/AWWA C653-03 Disinfection of Water Treatment Plants, as amended).
9. If the community's water supply is expected to be unsafe for human consumption, assist Municipal officials in establishing locations where local residents can obtain safe drinking water from.