



CONTINGENCY PLAN Municipality of Machin

Machin 09-10

Vermilion Bay Water Treatment & Distribution Systems

Page 1 of 1

Problem: Low Chlorine Residual in the Clearwell

Contact Info: Overall Responsible Operator (ORO)
Operator-In-Charge (OIC)

- Procedures:**
1. Immediately notify the ORO and OIC.
 2. Check hypochlorinator operation. Perform a drawdown to verify chemical feeder output. Follow the discharge feed line checking for leaks. Test the filter effluent for free chlorine residual (at any point after the sodium hypochlorite injection point).
 3. If the chlorine residual has fallen below normal levels (a minimum of 0.80 mg/L), it may take a day or longer to raise the chlorine residual back to normal levels due to the retention time in the clearwell.
 4. In the interim period, the trim (or secondary) chlorination system can be turned on to inject sodium hypochlorite directly into the high lift discharge header, boosting the residual to an acceptable level.
 5. Under no circumstances should sodium hypochlorite be added manually through the access hatches as doing so invalidates the chlorine concentration time calculation. Instead, troubleshoot the chlorine injection problem and reinstate the injection system operation.
 6. If at any time the chlorine residual falls below:
 - a) The minimum level of chlorine as determined by the CT calculator for primary disinfection in the treated water reservoir or,
 - b) The minimum level of 0.80 mg/L leaving the plant required for secondary disinfection in the distribution system.

Issue a verbal and written report to the Ministry of Health (Health Officer), Ministry of the Environment (SAC) and the Municipality of Machin.