



**Vermilion Bay Water Treatment & Distribution Systems**

**Problem:**                   **Operating Treatment Units in Manual Operating Mode**

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

- Procedures:**
1. Notify the ORO and OIC.
  2. Open both flocculation tank inlet valves (50% open).
  3. Manually start one low lift pump.
  4. Verify chemical dosage and feed rates. Chemical feeders may need to be operated in manual mode, depending on the nature of the problem. If feeders need to be placed in manual mode, verify chemical dosages by performing drawdown verifications at the given flow rate.
  5. Open the filter rinse valves (25% open). Monitor turbidity for 10 mins.
  6. If filter turbidity levels are acceptable (below 0.30 NTU) after the 10 minute rinse period, close the filter rinse valve and open the filter effluent valve (25% open). Monitor filter water levels and adjust effluent valves accordingly to allow more or less water to pass through the filters. Do not allow filters to run dry.
  7. Start one GAC transfer pump. Open GAC filter influent and effluent valves. Open the GAC flow control valve (25% open), monitor flow rate and adjust valve position until GAC flow matches the raw water flow rate.
  8. Monitor reservoir levels (non-chlorinated and treated water wells) and stop production at appropriate water levels.
  9. Continue to troubleshoot the cause of failure to the automation system. Contact Selog for SCADA system failure. Contact Napier-Reid for treatment unit PLC failure. Contact an electrician for electrical failures. Contact the ORO for assistance if any additional problems are encountered.