RAW WATER PUMP TALOYOAK WATER TREATMENT PLANT

STEPS FOR REMOVAL

If RWP-1 or the associated equipment in the intake casing (heat trace, heat trace sensors, and power cables) is found to be defective, the pump can be removed from inside the IPH Building. *Note:* Do *NOT* attempt to remove the pump unless an electrician is present to disconnect the power cables.

- 1. Inside the Generator Room, turn "OFF" branch circuit breaker for the raw water intake pump that will be removed as well as the branch circuit breaker of the heat trace control panel serving the affected pump unit. These CB's are located inside the "Normal-Emergency" MCC and Panel 'B', respectively.
- 2. Inside the raw water pipe casing inlet in the Process Room, turn off the main disconnects to the pump and heat trace.
- 3. Disconnect the pump power cable from the starter. This must be done by an electrician
- 4. Disconnect the heat trace and the heat trace temperature sensors from the heat trace controller.
- 5. Disconnect the outlet piping from the intake to the first flange connection.
- 6. Remove the outer set of bolts from the off-take casing flange
- 7. Loosen, but do not remove the inner set of bolts on the flange to loosen the rubber gasket.
- 8. Pull the flange and rubber plug out of the casing
- 9. Remove the bolts from the flange and remove the flange and plug.
- 10. Using the pull cable (stainless steel cable) only, slowly start to pull the in the pipe and pump. Support the intake pipe and cables once the pipe starts to exit the casing pipe. It is easiest to pull the cable using a short length of rope and a loader or quad.
- 11. Continue pulling the cable while supporting the pipe as it exits the intake casing. Watch for snags.
- 12. The pipe is approximately 110 meters in length and will exit through the door.
- 13. Once the pipe is pulled the pump, heat trace and power cables can be removed, inspected or replaced.
- 14. Reverse the procedure to re-install the pump.