

# RAW WATER QUALITY UPSET S.O.P

(This SOP is to be used in anticipation of a raw water quality upset)

When heavy rain, snow, winds or a thaw is expected, there are some steps we can take beforehand to soften the blow of a potential upset. Listed below are the steps in which the operations team is expected to take to help us get through the upset without any major issues.

- The 5MGT must be filled to a level of 48'-50' 2-3 days before an event
- The 10 MGT needs to remain between 15'-18' during this time and through the event if possible
- Prep the filters by having their runtimes spaced out and 1-2 filters with 0 hours and ready to be put online
- **When raw NTU's start climbing, notify your management team ASAP**
- When raw NTU's begin to climb, raise the coagulant ratio/dose, referencing the "####chemical drawdown log sheet####" being kept at the top of the common folder. Raising the polymer ratio/dose may assist but doing this will depend on how high the raw NTU's get and will come from management
- Lower the clarifier runtimes to help with keeping turbidity carryover under control
- Wash filters based on hours and NTU's beginning to climb, do not wait for filter breakthrough to happen
- Perform turbidity and UV254 tests in lab using the raw sample tap in the HSP room
- If raw NTU's climb higher than 5.000ntu's and/or filter runtimes go under 15.0 hrs, call management who will come in along with a maintenance member to assist with operations, flushing of sample lines and turbidity meters