1. Procedure summary

This SOP addresses filtering of pond samples to rid it of algae and debris prior to water chemistry testing.

1.1. Related Procedures

<??>	<Related procedure number>
<Related procedure name>	<Related procedure number>

1.2. Procedure impacts and concerns

Safety	<Nitrile Gloves, Safety Glasses>	<Additional notes>
Quality	<Pond samples must be filtered to remove algae and debris that can interfere with water chemistry analysis.>	<Additional notes>
Delivery	<Delivery impacts>	<Additional notes>
Environmental	<Environmental impacts>	<Additional notes>
Cost	<Individual filters cost approximately $1.00 each>	<Please note that it is not uncommon to run into supply issues Whatman filters. These filters are often on back order.>
Compliance	<Compliance impacts>	<Additional notes>

1.3. Responsibilities and owners

Document Owner	Manage contentment and distribution	<Name>
Process Owner	Responsible for content and process validation	<Name>
Plant Manager	Responsible for implementation and conformance	<Name>

2. Process

2.1. Process description

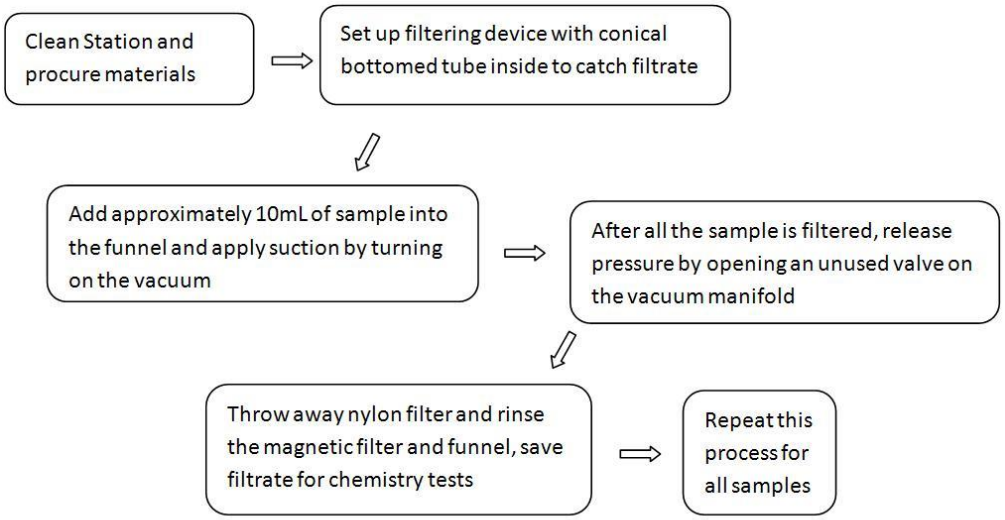
Pond samples must be filtered in order to prevent interference by particulate matter during water chemistry analysis. The removal of algae and other live organisms also increases the stability of the samples. Samples are filtered through a nylon membrane using a vacuum manifold and magnetic filter funnel system. The membrane prevents large particles from flowing through… (Don't know how to complete this sentence?)

<Additional notes>

2.2. Process diagram: Work Instruction

<Additional diagrams, figures, and pictures to explain this procedure >

<Additional notes>



2.3. Process steps

2.3.1 Label a 15 mL conical tube for each sample to be collected. <Additional notes>
2.3.2 Insert an inert material into a 1L filter flask to provide support for the conical tube.
2.3.3 Connect the filter flask to the vacuum pump.
2.3.4 Place the appropriately labeled test tube into the filter flask and attach the filter base such that the ceramic nose on the bottom of the filter base is inside of the tube. (See Figure 2)
2.3.5 Place a filter on top of the filter screen and ensure that it is properly seated on the filter support screen.
2.3.6 Carefully place the funnel body on top of the base. (See Figure 3)

Figure 1 - Tube set up to catch filtrate.

Figure 2 - Placing the funnel to create magnetic seal.

2.3.7 Inspect the vacuum manifold to ensure that the proper valves are open and all other valves are closed (see figure 4).
2.3.8 Pour approximately 10 mL of culture into the funnel and turn on the vacuum pump. Once the vacuum is established turn off the pump in order to avoid damaging the motor.

Figure 3 - Adding sample to funnel.

2.3.9 After filtration is complete, open a valve to release the vacuum (See figure 5).
2.3.10Remove the funnel and rinse the filter unit with DI water. Dispose of the nylon filter and place the conical tube in a rack.
2.3.11 Repeat steps 2.3.4-2.3.10 for all samples being sure to dry the filter unit with paper towels between samples.

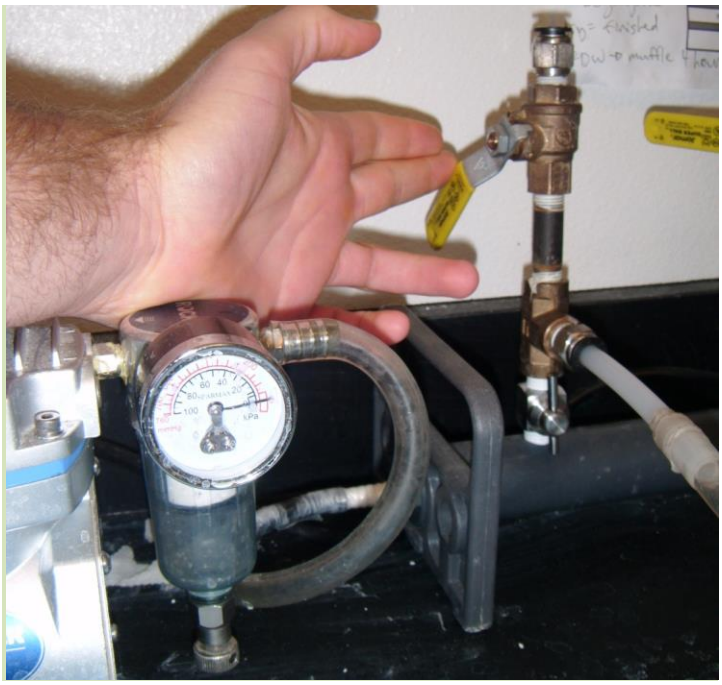


Figure 4 - Releasing pressure.

3. Required documents

3.1. Input documents

Manual for vacuum Pump <Input document number>

3.2. Output documents

< None> <Output document number>

4. Document control

4.1. Revision history

R0 – Initial Release – <Editor name>	<Date>
R1 – <Editor name>	<Date>

4.2. Document approval

<Name> <Approval date>

4.3. Document reviewers

<Name> <Last reviewed date>
<Name> <Last reviewed date>

5. Risk analysis

<Risk name> <Mitigation plan> <Owner> <RPN>