1. Procedure summary

Installing a Ph probe

Related Procedures

Ph probe calibration SOP	<Related procedure number> <Related procedure number>

Procedure impacts and concerns

Safety	Long sleeve shirt, long work pants, latex gloves, work gloves. Safety glasses	<Additional notes> *i.e., JHA file name and location*
Quality	If the probe is not installed correctly the plc will not see the change in Ph and therefore will not feed CO2. This could result in harm to the culture resulting in loss of pond.	<Additional notes>
Delivery	These tickets need to be completed as soon as possible.	<Additional notes>
Environmental	Proper PPE is required and disposal of bad Ph probe.	<Additional notes>
Cost	No longer than 30 minutes to remove and install new probe.	<Additional notes>
Compliance	Need Help.	<Additional notes>

Responsibilities and owners

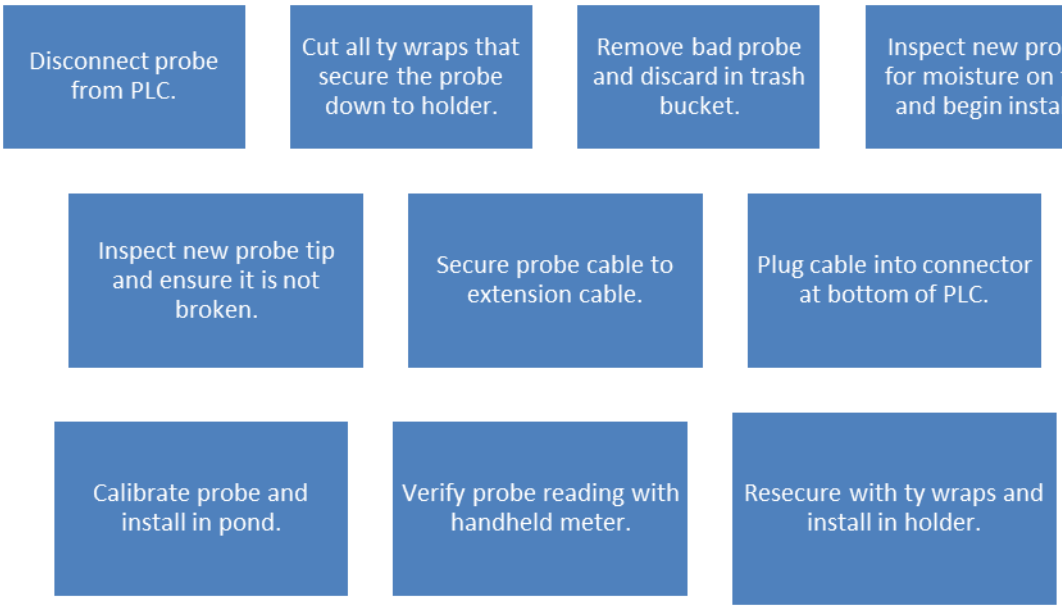
Document Owner	Martin Pacheco	<document owner>
Process Owner	Martin Pacheco	<process owner>
Site Manager	Rebecca White	<site manager>

2. Process

Process description

This procedure is to show the proper way to remove and install a Ph probe. <Additional notes>

Process diagram: Work Instruction



<Additional notes>

Process steps

<Additional notes>

If the pond in question has been reading some issues with the ph and calibrating the probe does not address the problem, Than the Probe needs to be replaced.
Disconnect the probe from the connector at the bottom of the PLC box.
Cut all ty-wraps that secure the probe cable.
Remove the old probe and cable and discard in the trash.
Remove new probe from the package and make sure the tip is in place and there is no dry white residue on the probe. (This indicates that the probe liquid is dry and may not function properly).
Remove the cap and inspect the tip of the probe to make sure it is not broken.
Connect the probe to the extension cable. (pictures attached)
Connect extension cable to connector on PLC box and calibrate probe.(See attached Calibration SOP)
Install probe into pond and compare the reading with a handheld probe.
Once the probe is calibrated and you have confirmed readings with hand held, you can begin securing.
Secure the ph probe to the holder in the pond and work your way back.
Securing from the probe to the box ensures that all slack in the cable is secured close to the PLC and does not create a trip hazard.
Collect all old ty-wraps and discard in trash.

2 Trouble shooting decision tree

<list decision tree for basic troubleshooting, if applicable>
<May attach as an appendix, if so, note here. ("See Appendix A")>

<Additional notes>

3. Required documents

Input documents

<Input document and storage instructions>

<Input document number>

Output documents

<Output document and storage instructions>

<Output document number>

4. Document control

Revision history

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

Document approval

<Name>

<Approval date>

Document reviewers

<Name>

<Last reviewed date>

<Name>

<Last reviewed date>

5. Risk analysis

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