
	GILES CHEMICAL ~ PREMIER MAGNESIA		
	Company Procedure		
	Title: pH Probe Calibration for Sewer Probe	Number: M12-PR-100-010	
	Owner: Robert Willis/Jody Conner	Revision: 01	
	Effective Date: 05/15/13	Page: 1 of 4	

1.0 Purpose

To outline steps to calibrate the PH probe located in the waste line (Asset Tag #10035) at the rear of the plant near the water recovery system

2.0 Scope

This procedure applies to the sewer pH probe at the Manufacturing facility. The probe shall be changed out whenever the life of the probe wears out.

3.0 Responsibility

Maintenance

4.0 Safety Considerations

Safety glasses and appropriate safety apparel is to be worn at all times. This includes wearing the appropriate protection for working at heights above six feet.

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.

5.0 Materials/Equipment

- 3 – 250 ml Plastic Beakers
- Calibration Buffers pH 4 and 7
- Deionized Water
- Wipes or Tissue

6.0 Procedure

This calibration procedure should be conducted during the morning and checked in the afternoon if a new probe was installed.

1. Set-up and procedure
 - a. Pour buffers and water in the containers

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- b. After removing the reservoir cover, remove the probe from the holder, clean with De-ionized water and wipe dry with tissue.



- c. Place in 4 buffer and observe the reading.



- d. Press the Calibrate button on the controller box.



- e. "0000" should appear in the screen. The first 0 is blinking
f. Press the up arrow to enter 1, then press horizontal arrow, the next 0 blinks, press the up arrow again and the readout should now show "1100", now press enter.
g. Cal-1 appears on the screen. Since the probe is in pH 4 buffer already just press enter.
h. The meter should read the buffer for pH and mv after completing the process the meter will show Cal-2

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- i. Remove the probe from the pH 4 buffer solution, rinse with clean DI water, dry with a tissue, then place in pH 7 buffer.





- j. Press enter then reads the pH and mv. After completing the test, the slope will appear on the screen. 90% and above is acceptable. 85 to 89% must discuss with Technical. Below 85% troubleshoot the system and replace the probe.



- k. After successfully calibrating press enter two times.
- l. Observe the reading in the buffer solution.
- m. Remove probe from buffer solution and rinse with DI water.



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n. Insert the probe back in the holder and check pH reading against the pH paper.



Conduct this calibration procedure at least monthly, or more frequently if needed.

7.0 Reference Documents

N/A

8.0 Amendment Record

Document review- updated format using new template and numbering system.

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