1. **PURPOSE:**

To describe a procedure for Usage and calibration of water flow meter at Discovery.

1. **SCOPE:**

This procedure applies to all water flow meters used in the manufacturing blocks at Discovery.

1. **RESPONSIBILITY:**

The responsibility of usage and calibration of water flow meter lies with a person of cadre not lower than a shift-in charge

1. **Definitions:** Nil
2. **PROCEDURE :**
   1. Note the initial reading of flow meter and connect the hose pipe and charging required quantity of water as per BPR.
   2. Connect the hosepipe to flow meter inlet and other end to water point.
   3. Ensure that the weighing balance is calibrated by checking the calibration record
   4. Take 200 L capacity pre weighed empty container. Collect 50 L of Water through Flow meter by constant flow.
   5. Weigh the container on calibrated weighing balance and record the weights in the given format.
   6. Collect water up to 200 liters from out let of flow meter and measure the weight for every 50 L of water collected on calibrated weighing balance.
   7. Record the weights in a calibration register, and compare the weights to volume of the water.
   8. Acceptable range: + 1% in Kg for the measured flow in L (i.e. 0.5 Kg for 50 L., 1.0 Kg for 100 L., 1.5 Kg. for 150 L., and 2.0 Kg for 200 L.)
   9. Place the status tag with details like date of calibration, due date of calibration.
   10. If the weights are beyond the acceptable range, inform to QA and replace the same with another flow meter and calibrate.
   11. The frequency of recalibration is once in three months.
3. **Formats / Annexure(S):**

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| --- | --- | --- |
| **S. No** | **Details** | **Format No.**  **(Current version)** |
| 01 | Flow Meter Calibration Record | PD036-FM005 |

1. **Change History:**

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| --- | --- | --- | --- |
| **Revision No.** | **Effective Date** | **Details of Revision** | **Ref. CCF No.** |
| 00 | 01.01.2011 | New SOP is introduced | ---- |
| 01 | 01.06.2014 | Formats are the part of SOP. So prepared Separately. | ---- |
| 02 | 01.04.2015 | Process Water Usage Record introduced and SOP Title Changed | ---- |
| 03 | 15.09.2015 | Process Water Usage Record changed from PD-F-039-00 to PD-F-040 | ---- |
| 04 | 01.01.2017 | Procedure elaborated and SOP format changed | PD-CRF-024/16 |
| 05 | 01.01.2018 | SOP format changed make to inline with SOP-QA-001-05. | CCF/GEN/17035 |