	COROMANDEL INTERNATIONAL LIMITED Sarigam	Doc No. : INST/ SOP/ 22
Issue No.01	DEPARTMENTAL MANUAL OF INSTRUMENT	Issue/ Revision Date: 02/10/2017
Revision: 00	Title: SAFE OPERATING PROCEDURE FOR TOC ANALYZER CAL & PM	Page 1 of 2

1.0 PURPOSE:

Calibration & preventive maintenance of TOC analyzer to maintain reliability.

2.0 SCOPE:

This procedure is applicable for calibration & preventive maintenance of TOC analyzer in process plant & ETP.


3.0 DEFINITION:

NIL

4.0 PROCEDURE:

- 4.1 Take work permit from the shift in charge to calibrate & preventive maintenance of TOC Analyzer.
- 4.2 Power off the furnace & wait one hour
- 4.3 After one hour shutdown the TOC analyzer.
- 4.4 Clean the TOC Analyzer panel by using blower.
- 4.5 Check all the tubes connection is proper or not. Otherwise connect properly.
- 4.6 Check the DM water level, HCL scrubber level, Carrier gas pressure (200KPa) & carrier gas flow(150 MI/Min). Level should be maintain as per operation manual.
- 4.7 Clean the homogenizer & sample tube properly.
- 4.8 Dissolve 2.123 gm of dry potassium hydrogen phthalate in 1 liter of DM water. This forms a standard solution of 1000 PPM. This solution is formed by the QC department.
- 4.9 Switch on the TOC analyzer & Furnace.
- 4.10 Wait for furnace temperature achieved to 680°C.
- 4.11 Then put the calibration tube in standard solution & press the calibration button.
- 4.12 After analysis, the reading should be show 1000 ppm (± 50 ppm).
- 4.13 If there is deviation in reading, then continue the procedure from 4.2
- 4.14 After calibration install the sensor in process line and handover the equipment to the shift in charge of the plant.
- 4.15 Calibration record should be maintain in DOC No.: QF/EN/09
- 4.16 Preventive maintenance record should be maintain in format no.: INST/F/06
- 4.17 Close the permit.

Prepared By :	Reviewed By :	Approved By :
Name :	Name :	Name :
Date :	Date :	Date :

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5.0 FREQUENCY:

- 5.1 At the time of initial startup after shutdown of more than two weeks.
5.2 After every 6 months, if plant is running.

6.0 RESPONSIBILITIES:

- 1) Asst. Manager/Sr. Officer/ Area in-charge (Inst.) :

7.0 ACCOUNTABILITY

Section Head

8.0 RECORDS:

Calibration Reports should be maintained for one year.

9.0 ATTACHMENTS :

Sr. No.	Format	Format No.
1	Calibration record	QF/EN/09
2	Preventive maintenance check points	INST/F/06

10.0 CHANGE RECORD :

Date	REV. NO.	CHANGES INCORPORATED
02/10/2017	00	Original Issue

**** END OF PROCEDURE ****

Prepared By :	Reviewed By :	Approved By :
Name :	Name :	Name :
Date :	Date :	Date :