



STANDARD OPERATING PROCEDURE

Title: Monitoring and Measurements

SOP No.:		Department:	EHS	
		Effective Date:		
Revision No.:		Revision Date:		
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1.0 OBJECTIVE:

To establish a system for measurement & evaluating the compliance in monitoring the progress in achieving objectives and targets as well as operational requirements.

2.0 SCOPE:

This SOP is applicable for key activities of the Environmental Management System of the company which ensures its performance according to operational requirements and the stated Environmental Management Programs.

3.0 RESPONSIBILITY:

Officer / Executive – EHS

4.0 ACCOUNTABILITY:

Head – EHS

5.0 ABBREVIATIONS:

EMS Environmental Management System
EMR Environmental Management representative
ISO International Organization for Standardization
Ltd Limited
No. Number
SOP Standard Operating Procedure

6.0 PROCEDURE:

6.1 Identify various measurements of key characteristics to be made for :

- a) Legal Requirements.
- b) Monitoring progress in achieving objectives & targets.
- c) Operational Requirements.

6.2 Decide the monitoring requirements and schedule for measurements, as per **Annexure I**, based on requirement given at 6.1 above and incorporate the same in relevant operational procedures of the respective departments.

6.3 Carry out the measurements as per schedule using relevant operational Procedures/ Work Instruction/ Legislative Requirements.

6.4 Ensure that the instruments used for measurements are calibrated for accuracy of measurement. Keep records of calibration as per procedure.

6.5 Keep records of the measurements carried out.

6.6 Review the results for the conformance with stipulated criteria and legislative/regulatory requirements.



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- 6.7** In case of any non-conformance to the threshold limits, send details of monitoring data to EMR for decision on the corrective action.
- 6.8** Study the magnitude of problem and decide corrective or preventive actions to eliminate the cause of actual or potential non-conformance and to investigate any impacts caused.
- 6.9** If necessary, carry out required changes in the procedure resulting from corrective & preventive actions as per guidelines given in Procedure for Document Control.
- 6.10** Once in year months, verify the schedule of measurements and in case the measurements are not carried out as per schedule or records are not maintained as per documented procedures, review the same with EMR for further corrective action.

7.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Requirements of monitoring and measurement	

ENCLOSURE: SOP Training Record

8.0 DISTRIBUTION:

- Controlled Copy No. 01 Quality Assurance
- Controlled Copy No. 02 Environment, Health & Safety
- Master Copy Quality Assurance

9.0 REFERENCES:

ISO 14001:2015 Environmental Management Systems (EMS) – Requirements with guidance for use.

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By



PHARMA DEVILS

ENVIRONMENT HEALTH SAFETY DEPARTMENT

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ANNEXURE – I

REQUIREMENTS OF MONITORING AND MEASUREMENT

S.No.	Particular	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4 (Jan.	Total for the
		(April to June)	(July to Sep.)	Oct. to Dec.)	to Mar.)	
No. of Samples						
1.	Ambient Air Monitoring (as per NAAQS)	3	3	3	3	6
2.	DG Stack Monitoring	5	5	5	5	10
3.	Boiler Stack Monitoring	1	1	1	1	2
4.	Work Place Monitoring	2	2	2	2	4
5.	Ambient Noise Monitoring					
	Day time	4	4	4	4	8
	Night Time	4	4	4	4	8
6.	Sewage Water Analysis	1	1	1	1	2
7.	ETP Water Analysis (as per CCA)	2	2	2	2	4
8.	ETP Sludge Analysis (All necessary parameters including metals)	0	1	0	1	1
9.	Ground Water Analysis (as per IS10500)	0	1	0	1	1
10.	Legionella Test in Cooling Tower water	0	1	0	1	1
11.	Polychlorinated Biphenyl in Transformer oil	0	1	0	1	1
12.	Soil Analysis	0	1	0	1	1
13.	Used Oil Analysis (As per Hazardous waste rules)	0	1	0	1	1
14.	DG Noise Monitoring	1	1	1	1	2
Total		23	29	23	29	52

Note: monitoring must be conducted within every quarter