



**STANDARD OPERATING PROCEDURE**

**TITLE:** Environmental Monitoring and Measurement

<b>SOP No.:</b>		<b>Department:</b>	SH	
		<b>Effective Date:</b>		
<b>Revision No.:</b>	01	<b>Revision Date:</b>		
<b>Supersede Revision No.:</b>	00	<b>Page No.:</b>	1 of 3	

**1.0 OBJECTIVE:**

To lay down a procedure for Environmental Monitoring and Measurement.

**2.0 SCOPE:**

This SOP is applicable for the monitoring, measuring and evaluating key characteristics of the operations and comparing the result with the set objectives and targets at .....

**3.0 RESPONSIBILITY:**

Officer / Executive - EHS

**4.0 ACCOUNTABILITY:**

Head – EHS

**5.0 ABBREVIATIONS:**

SOP            Standard Operating Procedure  
Ltd            Limited  
No.            Number  
EMS            Environmental Management System  
EMR            Environmental Management Review

**6.0 PROCEDURE:**

**6.1** The appropriate environmental performance indicators that shall be utilized as a specific description of the company's environmental performance includes the following:

- 6.1.1** Volume of waste produced.
- 6.1.2** Quantity of raw materials and energy used.
- 6.1.3** Specific pollutant qualities.
- 6.1.4** Percentage waste recycled.
- 6.1.5** Number of environmental incidents, etc.

**6.2 ENVIRONMENTAL PERFORMANCE MONITORING**

- 6.2.1** The key activities and processes that have significant impact on the environment shall be regularly monitored and measured to determine the level of actual performance and attainment compared to the set objectives and targets.
- 6.2.2** To measure specific pollutant qualities, sample of stack emission and wastewater shall be taken periodically or as suggested by Government Authorities from designated sources in the company. For the above said purpose, services of outside environmental laboratories may be hired.
- 6.2.3** Concerned department shall monitor their liquid or solid chemical waste generation through the use of respective waste monitoring over a specified period of time. The Department Heads shall determine the actual amount of waste disposed by the company.



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<b>Supersede Revision No.:</b>	00	<b>Page No.:</b>	2 of 3	

- 6.2.4 The Department Heads shall also keep a record of the energy (i.e. electricity) consumption of the company and record of the number of environmental incidents.
- 6.2.5 The Department Heads shall also monitor the consumption of natural resources such as water consumption, fuel consumption and the like.
- 6.2.6 Concerned departments shall also measure wastes that are being recycled.
- 6.2.7 Statutory requirements shall be monitored by the EHS Officer to ensure compliance of the company to the requirements at all times.
- 6.2.8 Data of actual performance shall be compared to the legal requirement to determine the level of compliance to the requirement.
- 6.2.9 Identifying appropriate performance indicator shall be a continuing process.

**6.3 DATA ANALYSIS AND EVALUATION**

- 6.3.1 The subcontracted environmental laboratory shall provide analysis report, based on the National Environmental Law's, air emission standards and effluent standards of the samples taken for air emission, wastewater, smoke/dust emission and noise emission.
- 6.3.2 Pharmadevils shall make use of the services of government approved laboratories or agencies, to analyze the samples of different environmental components.
- 6.3.3 The data collected per volume of waste, energy consumption and recycled wastes are analyzed by comparing to all related information such as environmental impact assessments, objectives and targets, previous data and regulations.
- 6.3.4 Based on the analysis made, the company may adjust its objectives and targets and make the necessary improvements in processes and systems.
- 6.3.5 The analysis should result to the identification of corrective actions, implementation of controls and preventive actions.
- 6.3.6 The data collected shall also be used to determine areas of non-compliance and shall be recorded in order to present compliances.
- 6.3.7 These environmental data's should be reported to the EMS Core Team and concerned departments during Management Review or at established period of time as agreed.

**6.4 MONITORING EQUIPMENT MAINTENANCE**

- 6.4.1 The company shall consider equipment calibration and its traceability to national or international standards.



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<b>Supersede Revision No.:</b>	00	<b>Page No.:</b>	3 of 3	

**6.4.2** The equipment used in the measurement of quantity of waste (e.g. weighing scale) shall be regularly maintained and checked.

**7.0 ANNEXURES:**

Not Applicable

**8.0 DISTRIBUTION:**

- Controlled Copy No.01                      Head EHS
- Master Copy                                      Quality Assurance Department

**9.0 REFERENCES:**

- ISO 14001:2004 Environmental Management System (EMS)-Requirements with guidance for use.

**10.0 REVISION HISTORY:**

**CHANGE HISTORY LOG**

Revision No.	Details of Changes	Reason for Change	Effective Date	Updated By
00	New SOP	Introduction of New SOP		