

# PHARMA DEVILS ENGINEERING DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Engineering	SOP No.:	
<b>Title:</b> Planned preventive maintenance of Utility, HVAC and Process Equipments	Effective Date:	
Supersedes: Nil	<b>Review Date:</b>	
Issue Date:	Page No.:	

# 1.0 OBJECTIVE

To lay down the procedure for planned preventive maintenance Utility, HVAC and Process Equipments.

### 2.0 SCOPE

This standard operating procedure (SOP) is applicable for the planned preventive maintenance Utility, HVAC and Process Equipments.

# **3.0 RESPONSIBILITY**.

Executive Engineering: To perform the maintenance activity and to maintain the preventive maintenance records. Manager Engineering: To check and approved the preventive maintenance records.

Manager QA: To assure the compliance of preventive maintenance records.

# 4.0 **PROCEDURE**

# 4.1 GENERAL INSTRUCTION FOR PROCESS EQUIPMENTS.

- 4.1.1 Executive Engineering shall inform the concerned department in advance for the preventive maintenance as per annexure I.
- 4.1.2 Isolate Power supply & put 'UNDER PREVENTIVE MAINTENANCE' status on the main panel of machine prior to start of maintenance activity of particular equipment.
- 4.1.3 Affix 'UNDER PREVENTIVE MAINTENANCE' status on the main panel of machine prior to start of maintenance activity of particular equipment. As per annexure II.
- 4.1.4 Do the preventive maintenance as per respective checklist.
- 4.1.5 After preventive maintenance executive Engineering shall hand over the Machine or equipment by taking satisfactory trail to the concerned department HOD.
- 4.1.6 Remove the "UNDER PREVENTIVE MAINTENANCE" status after preventive maintenance.

# 4.2 PREPARATION OF SCHEDULE

- 4.2.1 Executive Engineering shall prepare the preventive maintenance schedule as per Annexure-I.
- 4.2.2 Sr. Executive Engineering, Manager Engineering shall check the preventive maintenance schedule.
- 4.2.3 Mgr. QA shall approve planned Preventive schedule.
- 4.2.4 Based on the recommendation of the manufacturer a master schedule for preventive maintenance to be prepared for all utility, HVAC and Process Equipments.
- 4.2.5 Frequency for preventive maintenance shall be decided on the recommendation of manufacturer, process & product requirement.
- 4.2.6 Frequency shall be Weekly, Monthly, Quarterly, Six monthly & Annually, all frequency shall be predefined



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as per annexure I.

- 4.2.7 Prepared a detailed work description as a master check list for each equipment based on Weekly, Monthly, Quarterly, Six monthly & Annually as per annexure IV.
- 4.2.8 Sr. Executive Engineering checks the checklist.
- 4.2.9 Manager Engineering shall approve the master checklist.
- 4.2.10 Record the planned preventive maintenance activity as per approved checklist by using control copy issued by QA. Whenever activity report requires more space than provided, record it in a separate sheet and attach the same with checklist.

# 4.3 MAXIMUM GRACE PERIOD FREQUENCY FOR ALL EQUIPMENTS AS STATED IN THE ANNEXURE- I

- 4.3.1 Weekly (2 days)
- 4.3.2 Monthly (7 days)
- 4.3.3 Quarterly (10 days)
- 4.3.4 Every Six Monthly (1 5 days)
- 4.3.4 Annually (20 days)

### 5.0 SAFETY AND PRECAUTIONS:

- 5.1 Use required safety wears while doing preventive maintenance.
- 5.2 Ensure that all the tools used in the sterile area are cleaned and sanitized.

### 6.0 **REVISION HISTORY**

Revision No.	Reason for Revision	Superseded from & date
00	New	

#### 7.0 **REFERENCES**

Not Applicable.

### 8.0 ABBREVIATIONS

SOP: Standard Operating Procedure.



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HVAC: Heating Ventilation and Air Conditioning QA: Quality Assurance HOD: Head of Department

# 9.0 ANNEXURE

Annexure I : Intimation slip for preventive maintenance.

Annexure II : Status label for Preventive Maintenance schedule.

Annexure III: Planned preventive maintenance schedule.

Annexure IV : Master Checklist for Preventive Maintenance schedule.