



PHARMA DEVILS

ENGINEERING DEPARTMENT

STANDARD OPERATING PROCEDURE

Department: Engineering	SOP No.:
Title: Operation of Cooling Tower	Effective Date:
Supersedes: Nil	Review Date:
Issue Date:	Page No.:

1.0 REVISION HISTORY

Rev. No.	Details of changes	Reason for change
00	NIL	NEW SOP

2.0 OBJECTIVE

The Objective of this SOP is to describe the procedure for operation of Cooling Tower. To monitor the performance of the Cooling Tower.

3.0 SCOPE

This SOP is applicable for the operation of Cooling Tower at.....

4.0 RESPONSIBILITY

4.1 The Plant Operator shall be responsible for:

4.1.1 Operation of Cooling Tower.

4.1.2 Monitoring the operation.

4.1.3 Reporting for abnormal behavior.

4.2 The Engineer shall be responsible for:

4.2.1 Corrective action in case of any deviation.

4.2.2 Verifying the performance parameters as per acceptance criteria

5.0 ACCOUNTABILITY

Head –Engineering Services.



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6.0 PROCEDURE:

6.1 STARTING PROCEDURE

- 6.1.1 Check the water level in the cooling tower sump. Open fresh-water (RO) valve, if required.
- 6.1.2 Switch "On" the cooling-fan from the Motor Control Center (MCC).
- 6.1.3 Switch "On" the cooling water pump from the MCC.
- 6.1.4 Open the air vent valve of the cooling tower pump for few minutes to remove the air.
 - 6.1.4.1 Check the water pressure in the discharge line of the pump. It should not be less than 2.0 kg/cm² (Kilogram per Centimeter Square).
 - 6.1.4.2 If the discharge water pressure is below 2.0 kg/cm², open the air vent valve and remove the air pockets till the steady flow of water comes through the vent, then close the vent valve.
 - 6.1.4.3 Check for any abnormal noise and vibrations. Rectify it, if required.

6.2 STOPPING PROCEDURE:

- 6.2.1 Switch 'Off' the cooling water pump.
- 6.2.2 Switch 'Off' the cooling fan.

NOTE: Before stopping cooling tower, ensure that all equipment where cooling water is applicable is switched 'off'.

7.0 ANNEXURES:

NIL.

8.0 References (S)

NIL.



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9.0 Glossary

SOP	:	Standard Operating procedure
No	:	Number
MCC	:	Motor Control Center
RO	:	Reveres Osmosis