



STANDARD OPERATING PROCEDURE

Department: Engineering

Title: Sanitization of RO Membrane

SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	1 of 4

1.0 OBJECTIVE:

To lay down a procedure for Sanitization of RO Membrane

2.0 SCOPE:

This SOP is applicable for Sanitization of Sanitization of RO Membrane.

3.0 RESPONSIBILITY:

Officer / Executive Engineering

4.0 ACCOUNTABILITY

Head Engineering

5.0 PROCEDURE:

5.1 CIP SKID:

5.1.1 Alternate Pump shall be used for sanitization.

5.1.2 Fill the CIP tank with 200 ltr. of purified water

5.1.3 Switch on the heater raise the temperature of Purified water inside the CIP Tank up to $85\text{ }^{\circ}\text{C} \pm 2^{\circ}\text{C}$.

5.1.4 Circulate this hot water in RO Pressure vessel through circulation pump minimum for 1 hour.

5.1.5 Drain the hot water and circulate with fresh purified water, to down the temperature of the RO Membranes.

5.1.6 Officer / Executive Engineering shall intimate QC to collect the sample for the analysis.

5.1.7 Officer / Executive QC shall collect the sample from different sampling locations as per the schedule, analysis and submits the report to QA.

5.1.8 Officer / Executive Engineering shall prepare a Sanitization schedule as per **Annexure – I. “RO Membrane Sanitization Schedule”**.

5.1.9 Frequency of the sanitization shall be 30 ± 7 days or whenever required.



STANDARD OPERATING PROCEDURE

Department: Engineering

Title: Sanitization of RO Membrane

SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	2 of 4

5.1.10 Record the sanitization details as per **Annexure –II. “RO Membrane Sanitization Record”**.

6.0 REFERENCES:

Not applicable

7.0 ANNEXURES:

ANNEXURES No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	RO Membrane Sanitization Schedule	
Annexure-II	RO Membrane Sanitization Record	

ENCLOSURES: SOP training record

8.0 DISTRIBUTION:

- Controlled Copy No. 1 Head Corporate Quality Assurance
- Controlled Copy No. 2 Head Engineering
- Master Copy Quality Assurance Department

9.0 ABBREVIATIONS:

SOP Standard Operating Procedure
QA Quality Assurance
QC Quality Control
°C Degree Centigrade
CQA Corporate Quality Assurance
NLT Not Less Than
ID Identification No.

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

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



PHARMA DEVILS
ENGINEERING DEPARTMENT

STANDARD OPERATING PROCEDURE

Department: Engineering

Title: Sanitization of RO Membrane

SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	3 of 4

ANNEXURE – I
RO MEMBRANE SANITIZATION SCHEDULE

S.No.	DATE	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	REMARK
1.														
2.														
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														
11.														
12.														



Complete

Prepared By
Executive / Officer Engineering
Sign & Date

Checked By
Head Engineering
Sign & Date

Approved By
Head QA
Sign & Date

