

PHARMA DEVILS

ENGINEERING DEPARTMENT

Title: Sterilization of WFI Storage Tank, Loop line and Vent Filter			
SOP No.:	Revision No.:	00	
Effective Date:	Supersedes No.	Nil	
Review Date:	Page No.	1 of 4	

1.0 OBJECTIVE:

To lay down a procedure for Sterilization of WFI Water Storage Tank, Loop line & Vent Filter.

2.0 SCOPE:

This SOP is applicable for Sterilization of WFI Water Storage Tank, Loop line & Vent Filter at

3.0 RESPONSIBILITY:

Officer/Executive - Engineering

4.0 ACCOUNTABILITY:

Head – Engineering

5.0 **DEFINITION:**

NA

6.0 PROCEDURE:

6.1 STERILIZATION OF WFI STORAGE TANK & VENT FILTER

- 6.1.1 Drain all the Water for Injection (WFI) from the storage tank through Diaphragm valve.
- 6.1.2 Close the Diaphragm valves which allows steam flow towards Loop Line.
- 6.1.3 Open the pure steam (Pneumatic) valve to allow the steam into the WFI storage tank.
- 6.1.4 Back Pressure Release Valve (BPRV) prevents back flow of steam from WFI Storage tank.
- 6.1.5 Hold the pure steam in WFI storage tank for 30 minutes when the temperature is achieved at 121°C and pressure 1.5 kg/cm².
- 6.1.6 Vent filter is also sterilized at the same parameters which is installed in WFI Storage tank.
- 6.1.7 Record the details of sterilization of WFI storage tank & Vent Filter in Annexure-I.
- 6.1.8 After integrity of vent filter sterilization of WFI storage tank shall be performed and activity shall be recorded in Annexure-I.

Frequency of Sterilization of WFI Storage tank & Vent Filter: Monthly \pm 5 Days.



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6.2 STERILIZATION OF WFI LOOP LINE

- 6.2.1 Close the Diaphragm valves which allows steam flow towards WFI Storage Tank.
- 6.2.2 Open the pure steam valve (Pneumatic) to allow the steam into the Loop Line.
- 6.2.3 Hold the pure steam in Loop Line for 30 minutes when the temperature is achieved at 121°C and pressure 1.5 kg/cm².
- 6.2.4 Record the details of sterilization of Loop Line in Annexure-II.

Frequency of Sterilization of WFI Loop Line: Monthly \pm 5 Days

7.0 ABBREVIATIONS:

SOP Standard Operating Procedure

Pvt. Private

Ltd. Limited

NA Not Applicable

WFI Water for Injection

8.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Sterilization Record of WFI Storage Tank and Vent Filter	
Annexure-II	Sterilization Record of WFI Loop Line	

9.0 DISTRIBUTION:

• Master Copy Quality Assurance Department

• Controlled Copy No. 01 Head Engineering

10.0 REFERENCES:

In House

11.0 REVISION HISTORY:

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



Month-----

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ANNEXURE – I STERILIZATION RECORD OF WFI STORAGE TANK AND VENT FILTER

Year----

Date	Sterilization Temperature	Sterili	zation	Sterilization	Checked	Remarks
	(121°C) Achieved at	From	То	Done By	By	



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ANNEXURE – II STERILIZATION RECORD OF WFI LOOP LINE

MonthYea	ar
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Date	Sterilization Temperature	Sterili	zation	Sterilization		Remarks
	(121°C) Achieved at	From	То	— Done By	By	