



**STANDARD OPERATING PROCEDURE**

**Department:** Engineering

**Title:** Replacement of Rinse of Mixed Bed Unit

<b>SOP No.</b>		<b>Revision No.</b>	
<b>Effective Date</b>		<b>Supersedes No.</b>	
<b>Review Date</b>		<b>Page No.</b>	1 of 4

**1.0 OBJECTIVE**

The purpose of this SOP is:

- 2.1 The Objective of this SOP is to describe the procedure for Replacement resins of Mixed Bed Unit.

**3.0 SCOPE**

- 3.1 This SOP is applicable for the procedure for Replacement resins of Mixed Bed Unit at .....

**4.0 RESPONSIBILITY:**

- 4.1 The Maintenance Operator shall be responsible:

- 4.1.1 Responsible for replacement of Mixed Bed Unit.
- 4.1.2 Responsible for maintaining the Replacement resins of Mixed Bed Unit record.

- 4.2 The Maintenance Engineer shall be responsible:

- 4.2.1 Responsible to ensure proper Replacement resins of Mixed Bed Unit.
- 4.2.2 Responsible to take corrective action if any deviation.

**5.0 Accountability**

Head –Engineering Services

**6.0 PROCEDURE:**

**6.1 SAFETY MEASURES:**

- 6.1.1 A person carrying out the activities must be worn protective clothing, safety shoes and gloves.
- 6.1.2 A plenty of soft water must be available.

**6.2 PRIMARY CHECKS:**



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**6.2.1** Ensure that the availability of new Resins Bayer Lewatit Mono Plus on S 100 – 106 for Mixed Bed Unit.

**6.2.2** Ensure that the power supply to the Mixed Bed Unit.

**6.2.3** Display the ' Under Maintenance Board'.

**6.3 REPLACEMENT PROCEDURE:**

**6.3.1** Open the top cover of Mixed Bed Unit.

**6.3.2** Remove the strainers.

**6.3.3** Take out the Resin from the vessels into different plastic drums by siphon.

**6.3.4** Clean the vessels and strainers with fresh water.

**6.3.5** After cleaning of vessels, load the new resins into respective vessels.

**6.3.6** Refit strainers. And box up the vessels with top cover.

**6.3.7** After closing the vessels, open valves XV 01, XV 02, XV 03, XV 06, XV 16 and valves V 19, V 20 by manual mode. Then switch 'ON' the feed pump and allow rinsing the plant for 30 Minutes.

**6.3.8** Sanitize the plant as per SOP.

**6.4 FREQUENCY FOR MIXED BED RESINS REPLACEMENT:**

**6.4.1** Replacement resins of Mixed Bed to be carried out once in three years as per manufacturer's recommendation for better performance of the system.

**7.0 ANNEXURES:**

Annexure –1: Replacement resins of Mixed Bed Unit.

**8.0 References (S):**

Nil



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<b>Review Date</b>		<b>Page No.</b>	3 of 4

### 9.0 Glossary:

SOP	:	Standard Operating procedure
No	:	Number
%	:	Percentage.
PSG	:	Pure Steam Generator.
MM	:	Millimeter
“	:	inch

