



STANDARD OPERATING PROCEDURE

Department: Engineering

Title: Replacement of Sand in Multi Grade Filter

SOP No.		Revision No.	
Effective Date		Supersedes No.	
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1.0 OBJECTIVE:

To lay down a Procedure for Replacement of sand in Multi Grade Filter.

2.0 SCOPE:

This SOP is applicable for replacement of sand in Multi Grade Filter.

3.0 RESPONSIBILITY:

Officer / Executive – Engineering

4.0 ACCOUNTABILITY:

Head – Engineering

5.0 PROCEDURE:

5.1 Open the mouth of the MGF vessel, remove the filter.

5.2 Connect the mouth with hose pipe, and start water pump, the sand shall come along with water, and collect in suitable container/bag.

5.3 Stop the pump & remove the hose pipe and drain the water in the vessel.

5.4 Then fill Multi Grade Filter vessel with Pure Graded Quartz Sand. As follows:

5.5 First pour the MGF vessel with Coarse Media (4/8 mesh size) with quantity of 50 Kgs through upper side of vessel by avoiding wastage during filling.

5.6 After completed filling of coarse media, fill Medium Media (8/16 mesh size) with quantity 50 kgs through top of the vessel.

5.7 After completed filling of Medium Media, fill Fine Media (16/32 mesh size) through top of the vessel.

5.8 Place the filter on the mouth of the vessel.

5.9 Close the mouth of vessel air tight.

5.10 Rinse the sand with raw water for half an hour, and discard the water.



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5.11 Record the Sand replacement details in **Annexure-I**.

5.12 Frequency: When there is damage to the MGF or if the SDI is greater than 6.

6.0 REFERENCES:
Manual.

7.0 ANNEXURES:

ANNEXURES No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Sand replacement Record in MGF	

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
SDI Silt Density Index
MGF Multi Grade Filter

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

