



**Title:** Sampling and Testing of Source Water

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
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**PURPOSE:**

To lay down a procedure for sampling and testing of Source Water.

**SCOPE:**

This procedure is applicable for sampling and testing of source water in Quality Control department.

**RESPONSIBILITY:**

Officer/Executive - Quality Control.

**ACCOUNTABILITY:**

Head - QC Department.

**PROCEDURE:**

**1.0 Sampling Procedure for Chemical Analysis**

- 1.1 Clean and dried Flasks/ Bottle shall be taken for sampling of source water.
- 1.2 Before collecting the source water, flask/bottle shall be rinsed twice with about 200 ml sample and 1000 ml source water shall be collected for chemical analysis.

**2.0 Sampling Procedure for Microbiological Analysis**

**2.1 Bottle Preparation**

- 2.1.1 The required number of wide mouth bottles having screw caps or conical flasks with cotton ] plugs shall be taken for sampling of Source water.
- 2.1.2 The bottles/flasks shall be kept in the autoclave ID and the bottles/flask shall be sterilized by operating the autoclave as per Cycle No.4 (Validated cycle for G & C sterilization).
- 2.1.3 SOP shall be followed for operating the auto sliding double door autoclave.
- 2.1.4 After completion of sterilization cycle, the Door 2 of the autoclave shall be opened from the buffer room side and the bottles shall be taken out from the autoclave.
- 2.1.5 The bottles shall be cooled to Room Temperature. After cooling, the bottles shall be used for Sampling.



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## 2.2 Sampling

2.2.1 Label the sample container as follows

<b>Name of sample</b>	:
<b>Sampling Location:</b>	
<b>Sampling point No:</b>	
<b>Date/Time</b>	:
<b>Sampled by</b>	:

2.2.2 The sampling port of source water sampling point shall be opened and allowed to drain for 2 min.

2.2.3 The bottle/ flask shall be taken near the sampling port and the cap/ cotton plug shall be opened. The Sample (about 200 ml) shall be collected and immediately the cap / cotton plug shall be closed tightly.

2.2.4 After sampling of water the sample shall be brought to the laboratory for analysis.

2.2.5 The sample shall be analysed within 1 hour. If the sample is not analysed then the sample shall be stored at 2-8°C and analysed within 8 hours.

## 3.0 Testing of source water

3.1 The inspection lots generated by SAP system shall be entered in the Water sample inward register as per Annexure –V of SOP. If extra lot has been generated, the lot shall be cancelled and the required sampling point shall be generated by “Manual call” in SAP system.

3.2 Chemical and Microbiological testing shall be done for the source water sampled from Borewell-.01 (Utility 2) and Borewell-02(Utility 1) as per source water IH specification

3.3 Results shall be recorded in the source Water Worksheet Annexure – I and the UD shall be done in SAP system after complete analysis of source Water.

3.4 After Analysis, Analytical Test Report i.e. Annexure –II shall be attached with the TDS.

## 4.0 Sampling schedule of source water

4.1 The schedule is as per Table-I given below:



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**TABLE-I**

**Source Water Sampling Points and its Schedule**

S.No.	Description	Location
1.	Borewell 01	Utility 2
2.	Borewell 02	Utility 1

**5.0 Frequency :**

- 5.1 Testing of source water shall be carried out once in a year by outside agency as per BIS (Bureau of Indian Standards).
- 5.2 Testing of source water shall be carried out once in a month as per In house source water specifications.

**ANNEXURE(S):**

Annexure I: Source Water Worksheet.

Annexure II: Certificate of Analysis of Source Water.

**REFERENCE(S):**

In House.