

QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE				
Department: Quality Control	SOP No.:			
Title: Handling, Usage and Destruction of Reagents and Chemicals	Effective Date:			
Supersedes: Nil	Review Date:			
Issue Date:	Page No.:			

#### 1.0 **OBJECTIVE:**

To lay down a procedure for handling, usage and destruction of reagents & chemicals.

#### 2.0 SCOPE:

This SOP is applicable to handling, usage and destruction of reagents & chemicals in quality control department.

#### 3.0 RESPONSIBILITY:

Officer, Executive—Quality Control: To handling, usage and destruction of reagents & chemicals. Head – Quality Control: Adherence to comply the SOP.

#### 4.0 PROCEDURE:

#### 4.1 Handling, Usage of Reagents & Chemicals:

- 4.1.1 After receipt of reagents & chemicals from suppliers, check the grade/ class of material like reagents / solvents against the details given in delivery challan and verify whether same reagents & chemicals was indented. Record the details in inward register as per annexure-III.
- 4.1.2 Check the integrity of pack before placing on rack.
- 4.1.3 Arrange the chemicals in dedicated place in the quality control laboratory and affix a reagent label on each container as per Annexure-I.
- 4.1.4 Assign shelf life/Expiry date of 5 years unless otherwise mentioned on the container. At the time of opening for use write the date of opening and use before date on the reagent/solvents label as per Annexure-I.
- 4.1.5 All reagents & chemicals (Except solvents) shall be used within 2 years from the date of opening or expiry date declared by the manufacturer, whichever is earlier.

All solvents shall be used within 1 year from the date of opening or expiry date declared by the

- 4.1.6 manufacturer, whichever is earlier.
- 4.1.7 Reagents shall be visually examined during their usage.
- 4.1.8 If any discolouration, lump formation or precipitation (in case of liquids) or any unusual appearance is observed, it shall not be used and shall be discarded.



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- 4.1.9 All reagents & chemicals shall be stored at room temperature, unless any other storage condition is specified on the label.
- 4.1.10 Toxic reagents & chemicals shall be identified and stored separately under lock and key.
- 4.1.11 A list of all chemicals / reagents shall be prepared and numbered serially as follows.

For Solid chemicals: S1, S2, S3 ..... etc.

For Liquid chemicals: L1, L2, L3 ..... etc.

- 4.1.12 MSDS (material safety data sheets) of all toxic chemicals shall be maintained.
- 4.2 Disposal of laboratory reagents & chemicals:
- 4.2.1 At the end of the month, prepare a list of reagents & chemicals which are to be expired or if, any reagents & chemicals abnormal found in appearance during routine use for the same month.
- 4.2.2 Segregate the solid and liquid reagents & chemicals and cross the label.
- 4.2.3 Affix the label "For Destruction" for each reagents & chemicals bottle or container and hand over to ETP department for further disposal.
- 4.2.4 Maintain the destruction record of all reagents & chemicals after the expiry date or rejection due to any discoloration, lump formation or precipitate, as per Annexure II.

Note: Use empty bottle of reagents & chemicals shall be rinse with water before sending to scrap yard.

#### 5.0 ANNEXURE (S):

Annexure - I : Specimen label for Chemical / Reagent.

Annexure - II: Destruction record of Reagents/ Chemicals

Annexure - III: Chemical / Reagent Inward register

#### 6.0 REFERENCE (S):

SOP Reference: Procedure for operation of Effluent Treatment Plant.

SOP: Preparation, approval, distribution, control, revision and destruction of Standard Operating Procedure (SOP).

#### 7.0 ABBREVIATION (S)/DEFINITION (S):

**ETP**: Effluent Treatment Plant



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#### **REVISION CARD**

S.No.	REVISION No.	REVISION DATE	DETAILS OF REVISION	REASON (S) FOR REVISION	REFERENCE CHANGE CONTROL No.
1	00			New SOP	-

ANNEXURE I SPECIMEN LABEL FOR CHEMICAL/REAGENT



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Chemical / Reager	nt
Date of Receipt	
Assigned Expiry date	
Date of Opening	
Use before	
Sign Date	

# ANNEXURE II DESTRUCTION RECORD OF REAGENTS/CHEMICALS

S.No.	Name of Reagents/ Chemicals	Qty. Destroyed	Reason for destruction	Destroyed By /Date	Verified By



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#### ANNEXURE II REAGENT/CHEMICAL INWARD REGISTER

Name of Reagent/Chemical:

S.No.	Date	Challan No.	Qty. Received	Received by	Qty. Issued	Issued by/ date	Qty. in Stock	Remarks (If any)