

MICROBIOLOGY DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Microbiology	SOP No.:	
Title: Disposal of used media and Cultures	nd Cultures Effective Date:	
Supersedes: Nil	Review Date:	
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### 1.0 PURPOSE:

To lay down the procedure for Disposal of used media and cultures used for microbiological testing.

### 2.0 SCOPE:

This Standard Operating Procedure is applicable at Microbiology Department of ......

#### 3.0 REFERENCES:

- 3.1 CQ guideline: Guideline for receipt, storage, preparation, growth promotion test, use and disposal of microbiological media
- 3.2 CQ Directive: Reconciliation of microbiological media and disposal of used microbiological media and biohazard waste

### 4.0 RESPONSIBILITY:

- 4.1 Officer or Executive of Microbiology department shall be responsible for preparation of new or revision of existing SOPs.
- 4.2 Head of the department/designee of respective areas & QA shall be responsible for reviewing the SOPs.
- 4.3 Plant Head and Head-Quality shall be responsible for approval of SOP.
- 4.4 QA shall be responsible for distribution and control of SOPs to various departments.

#### **5.0 ABBREVIATIONS:**

- 5.1 CC : Change Control
- 5.2 °C : Degree Celsius
- 5.3 ETP : Effluent Treatment Plant
- 5.4 NA : Not Applicable
- 5.5 No. : Number
- 5.6 QA : Quality Assurance
- 5.7 QC : Quality Control



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5.8 W/V : Weight/Volume

#### **6.0 DEFINITION:**

6.1 **Standard Operating Procedure (SOP):** A written authorized procedure, which gives instructions for performing operations.

#### 7.0 PROCEDURE:

- 7.1 **Disposal of Used and Contaminated Cultures**
- 7.1.1 Remove the culture tube from the refrigerator after the requisite time period i.e. the preservation period of culture.
- 7.1.2 Dip the culture/media surface by the validated disinfectant up to 30 minutes and Sterilize the culture tube by autoclaving in Autoclave at 121°C and 15 lbs pressure for 30 minutes or validated time.
- 7.1.3 After completion of sterilization cycle, remove the culture tubes from the autoclave and drain the liquefied media in the biohazard waste bin and sent to ETP.
- 7.1.4 All the cotton plugs to be kept in the biohazard waste bin and sent to ETP.
- 7.1.5 After Drain the media/culture the culture tubes dip in 1 % Oxivir/ Divosan or any validated disinfectant solution for half an hour.
- 7.1.6 After Half an hour remove the tubes from disinfectant and dip in 0.1 % w/v Sodium Lauryl Sulphate solution for half an hour.
- 7.1.7 Wash hands thoroughly with soap or any validated disinfectant.

**Note:** The personnel handling the Microbiological Media and Cultures after incubation and sterilization shall wear protective gears i.e. Mask, Gloves and Goggles.

### 7.2 **Disposal of Broth Cultures and Liquid Media Tubes**

- 7.2.1 After completion of incubation period and examination, remove all broth cultures and tubes containing liquid media and take them for sterilization.
- 7.2.2 Sterilize the broth culture and liquid media tubes / flasks by autoclaving in Vertical Autoclave at 121°C and 15 lbs pressure for 30 minutes.
- 7.2.3 After completion of sterilization cycle remove the culture tubes from the autoclave and drain the



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media under continuous running water.

- 7.2.4 All the cotton plugs and Aluminum foil shall be collected in a biohazard waste bin.
- 7.2.5 Wash the tubes and flasks under tap water and remove all traces of broth.
- 7.2.6 Dip the broth cultures and liquid media tubes in 1 % Oxivir/ Divosan or any validated disinfectant solution for half an hour. Remove the tubes from disinfectant and dip in 0.1 % w/v Sodium Lauryl Sulphate solution for half an hour.
- 7.2.7 Carry out washing of tubes and flasks as per the current version of SOP "Washing and cleaning procedure for Glassware in Microbiology Laboratory"
- 7.2.8 All solid waste like cotton plugs/ Aluminum foil/poly bags etc. shall be sent for incineration.

## 7.3 **Disposal of Solid Media**

- 7.3.1 After completion of incubation and examination, remove all culture tube Slants and plates, take them for further treatment.
- 7.3.2 Remove all labels or marking on the tubes / flasks.
- 7.3.3 Collect the media in S.S. container or Disposable sterilizing bags and dip the media in validated disinfectant up to 30 minutes and autoclaving in Autoclave at 121°C and 15 lbs. pressure for 30 minutes.
- 7.3.4 Collect the glass petri plates/tubes in S.S. container or disposable bag and autoclaving in Autoclave at 121°C and 15 lbs pressure for 30 minutes.
- 7.3.5 After completion of sterilization cycle remove the culture tubes/petri plates from the autoclave.
- 7.3.6 Dip the culture tubes and petriplates in 1 % Oxivir/ Divosan or any other validated disinfectant solution for half an hour. Remove the tubes & petriplates from disinfectant and dip in 0.1 % w/v Sodium Lauryl Sulphate solution for half an hour.
- 7.3.7 Carry out washing of tubes and flasks as per the current version of SOP No. BSQM/007 "Washing and cleaning procedure for Glassware in Microbiology Laboratory"
- 7.3.8 After completion of autoclave cycle send the media/solid waste like cotton plugs/ Aluminum foil/poly bags etc. shall be sent to ETP.

### 7.4 **Disposal of Plastic petri plate**

7.4.1 After completion of incubation and examination, remove all petri plates, take them for further



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treatment.

- 7.4.2 Remove all labels or marking on the Petriplates.
- 7.4.3 Dip the media surface by validated disinfectant up to 30 minutes and autoclaving in Autoclave at 121°C and 15 lbs. pressure for 30 minutes.
- 7.4.4 After completion of autoclave cycle the petriplates along with media shall be sent to ETP.

Note: The personnel shall wear protective gears i.e. Mask, Gloves and Goggles during handling and collecting the waste.

### **8.0 DISTRIBUTION:**

- 8.1 Quality Assurance
- 8.2 Quality Control

### 9.0 ANNEXURE:

9.1 Annexure-1: Used Culture and Media Destruction Record

### **10.0 REVISION HISTORY:**

Version Number	Revision Details	Effective Date	Ref. Change Control Number
00	New SOP		NA