



**Title:** Cleaning of Reverse Laminar Air Flow & Laminar Air Flow Filters

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
<b>Review Date:</b>		<b>Page No.</b>	1 of 6

**1.0 OBJECTIVE:**

To lay down a Procedure for Cleaning of Reverse Laminar Air Flow Filters and Grills.

**2.0 SCOPE:**

This SOP is applicable for Cleaning of Reverse Laminar Air Flow Filters / Laminar Air Flow.

**3.0 RESPONSIBILITY:**

Operator / Officer / Executive – Engineering

**4.0 ACCOUNTABILITY:**

Head – Engineering

**5.0 ABBREVIATIONS:**

RLAF            Reverse Laminar Air Flow  
LAF             Laminar Air Flow  
SOP             Standard Operating Procedure

**6.0 PROCEDURE:**

- 6.1** All washable filters of LAF (Pre Filter) & RLAF (Pre, Fine Filters) shall be cleaned in designated filter cleaning Area.
- 6.2** Concern department shall raise the intimation as per Annexure –II Titled as “Intimation for cleaning of filter” as per their requirement/schedule (frequency defined in their SOP to engineering department for RLAF & LAF filter cleaning and in addition to the intimation concern department personal shall inform verbally /IOM to engineering person.
- 6.3** In case of RLAF filter cleaning, Production person along with engineering person will open the filter grill with the help required tools and remove the filter from the filter plenum.
- 6.4** In case of LAF filter cleaning, production person will open the filter grill with the help required tools and remove the filter from the filter plenum. Production person will put the removed un-cleaned filter in clean polybag with un-cleaned label (Annexure - III) affix on it, and the same will carry through change room/pass box for handing over to HVAC person for cleaning activity along with its intimation slip.



**Title:** Cleaning of Reverse Laminar Air Flow & Laminar Air Flow Filters

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
<b>Review Date:</b>		<b>Page No.</b>	2 of 6

- 6.5** After information (Annexure - II), Concern personnel of engineering shall clean the filters as per given below procedure & provide the cleaned filter to respective user department.
- 6.5.1** Switch 'OFF' the RLAF/ LAF Unit.
  - 6.5.2** Dismantle the Grills, Pre Filters & Fine Filter of RLAF & Pre filter of LAF.
  - 6.5.3** Remove the Grills and keep the filters in double polythene bag and tie with cable tie and affix the status label as un-cleaned filter.
  - 6.5.4** Take the Filters to the filter cleaning area.
  - 6.5.5** Remove the poly bag from un-cleaned filter and pass the filter through pass box/hatch window to filter cleaning area.
  - 6.5.6** Inspect the filters for any physical damage and proper sealing. If found any damage, then affix the rejected Label and discard the filter and record the log in remark column.
  - 6.5.7** Initially, clean the filter by raw water at a pressure 0.5-2.5 kg/cm<sup>2</sup>.
  - 6.5.8** Then clean the filter with compressed air at a pressure 0.5-2.5 kg/cm<sup>2</sup>.
  - 6.5.9** Finally Rinse the filter with Purified water.
  - 6.5.10** Semi Dry the filter with compressed air pressure 0.5-2.5 kg/cm<sup>2</sup>.
  - 6.5.11** Again inspect the filter visually after cleaning for any deposited powder/dust. If found any then re-clean the filter.
  - 6.5.12** After this place the filter in filter drying room through pass box/hatch window for drying.
  - 6.5.13** Dry the filters for maximum 04 hrs. at 35°C- 50°C temperature in drying room.
  - 6.5.14** Inspect the filter physically for properly drying.
  - 6.5.15** Details of filter cleaning, Drying shall be recorded in “**Filter Cleaning Record of RLAF/LAF**” as shown in **Annexure-I**.
  - 6.5.16** Detail of temperature monitoring of filter drying area shall be recorded as per **SOP**.
  - 6.5.17** Keep the dried Filters in polythene bag, close the poly bag with Cable tie and affix the Status label as cleaned filter as per **Annexure-III** “Status Label”.
  - 6.5.18** After cleaning and drying, keep the filters in double polythene bag and bring back to respective area.



**Title:** Cleaning of Reverse Laminar Air Flow & Laminar Air Flow Filters

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
<b>Review Date:</b>		<b>Page No.</b>	3 of 6

**6.5.19** Take out dried Filters through the pass box/ hatch window to cleaned filter storage Area

**6.5.20** Handover the cleaned filter to user for further activity.

**6.5.21** Officer / Executive Engineering shall maintain the filters cleaning record as per **Annexure-I**.

**6.6 FREQUENCY:**

**6.6.1** RLAF & LAF filters shall be cleaned as per intimation received from user department (**Annexure – II**).

**7.0 ANNEXURES:**

<b>ANNEXURE No.</b>	<b>TITLE OF ANNEXURE</b>	<b>FORMAT No.</b>
Annexure-I	Filters Cleaning Record of RLAF	
Annexure – II	Intimation for cleaning of filter	
Annexure – II	Status Label	

**ENCLOSURES:** SOP Training Record

**8.0 DISTRIBUTION:**

- Controlled Copy No. 01                      Quality Assurance
- Controlled Copy No. 02                      Engineering
- Master Copy                                      Quality Assurance

**9.0 REFERENCES:**

Not Applicable.

**10.0 REVISION HISTORY:**

**CHANGE HISTORY LOG**

<b>Revision No.</b>	<b>Change Control No.</b>	<b>Details of Changes</b>	<b>Reason for Change</b>	<b>Effective Date</b>	<b>Updated By</b>





# PHARMA DEVILS

ENGINEERING DEPARTMENT

**Title:** Cleaning of Reverse Laminar Air Flow & Laminar Air Flow Filters

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
<b>Review Date:</b>		<b>Page No.</b>	5 of 6

## ANNEXURE – II INTIMATION FOR CLEANING OF FILTER

<b>Intimation Date &amp; Time</b>		<b>Intimation Raised By :</b>	
<b>Job description</b>	<b>RLAF/LAF filter cleaning</b>	<b>Location /RLAF ID.:</b>	
<b>Filter removed by</b>	<b>Sign:</b>	<b>Date:</b>	<b>Time:</b>
<b>Clean filter fitted by</b>	<b>Sign:</b>	<b>Date:</b>	<b>Time:</b>
<b>Total no. of filters</b>		<b>Activity Completion Status (Ok/Not ok)</b>	
<b>Activity Review By</b>		<b>Sign &amp; Date</b>	<b>Time:</b>



# PHARMA DEVILS

ENGINEERING DEPARTMENT

**Title:** Cleaning of Reverse Laminar Air Flow & Laminar Air Flow Filters

<b>SOP No.:</b>		<b>Revision No.:</b>	00
<b>Effective Date:</b>		<b>Supersedes No.</b>	Nil
<b>Review Date:</b>		<b>Page No.</b>	6 of 6

## ANNEXURE – III STATUS LABEL

STATUS LABEL
<b>FILTER ID:</b>
<b>SECTION :</b>
<b>STATUS OF FILTER:</b>
<b>REMARKS:</b>
<b>CHECKED BY :</b> (SIGN & DATE)