

**TITLE**

RADIATION DETECTION TEST ON BIOWAVE FILTER

**OBJECTIVE**

The objective of this test is to provide information on radiation safety of Biowave Filter.

**TEST FACILITY**

Lynas Malaysia Sdn. Bhd.

Administration Building, Gate 2, Gebeng Industrial Estate, Kuantan, Pahang, Malaysia.

**TEAM MEMBERS**

Test Personnel: Mohd Sukri Yaakub, Environmental Specialist of Lynas Malaysia Sdn. Bhd.

Witnessed By: Leong Man Loong, SHEPROS Sdn. Bhd.

**TEST SAMPLE**

Biowave Filter with a size of 325 mm x 385 mm x 14 mm filled with compounded mineral granular.



**BIOWAVE FILTER TEST SAMPLE**

### METHODOLOGY OF THE STUDY

A portable unit of Radiation Detector (Mini Trace CSDF, SAPHYMO) was used to test the radiation emission of the test sample. The steps of the radiation measurement are as below:

1. The Radiation Detector was set "ON" to detect the ambient radiation reading. Record the reading in micro-Sievert/hour ( $\mu\text{Sv/h}$ ).
2. Put the Radiation Detector on top of the test sample, detect and record the radiation reading.
3. Make a comparison of radiation reading between ambient and test sample.

### RESULTS

Radiation Environment Exposure	Radiation Detector Reading
Ambient (Lynas' office reception area)	0.15 $\mu\text{Sv/h}$
Biowave Filter	0.15 $\mu\text{Sv/h}$



Test of radiation in ambient surrounding (0.15  $\mu\text{Sv/h}$ )



Test of radiation on Biowave Filter (0.15  $\mu\text{Sv/h}$ )

### CONCLUSION

There was no radiation emitted from Biowave Filter. The radiation detector showed 0.15  $\mu\text{Sv/h}$  for both ambient and Biowave Filter.

Approved and Witnessed By:

Leong Man Loong