Envirotech
We Care for Better Air

# APM 586


## NEED

Mining and Mineral-based industries all emit large quantities of pollutants including heavy metals like As, Cd, Cr, Hg, Ni, Pb etc. as also (sometimes). Almost all heavy metals have serious & chronic adverse health effects. Govt. of India has mandated monitoring of some heavy metals and PAH and standards have been notified for them in the National Ambient Air Quality Standards (NAAQS) of November, 2009. As per the standards heavy metal monitoring need to be carried out for long durations and results need to be reported annual averages. This instrment is capable of doing sampling for long durations (eg. One sample of one month duration)

## APPLICATION

APM 586 can be used for collecting dust samples for heavy metals like Lead, Arsenic and Nickel along with PAH's etc for long durations.

## OVERVIEW

Currently, heavy metals are being measured by analyzing the dust collected over the filter papers exposed, primarily for monitoring of $PM_{10}$, for 8 hour or 24 hour duration. One is able to detect the presence of heavy metals but not be able to measure it precisely due to the small quantity of PM due to short duration of Sampling as ,most Sampling System have operational limits to maximum 24 hours and if one wanted to calculate reliable annual average, then over 300 samples shall have to be collected, extracted and analyzed which is very laborious, time consuming and costly exercise. A need was thus felt for a long time for a sampler which can collect samples over longer periods enabling collection of adequate particulate matter representing an average over a long period.
EIPL, with its pioneering spirit, joined hands with IIT Delhi & has developed APM 586, which can collect samples over at least a month. Thus, only 12 samples may be required to calculate the annual average values in a reliable and representative manner. This greatly eases the analytical efforts and reduce the uncertainty involved.
It can run 24X7 for 30 days using a standard filter paper of EPM 2000 grade. This would also allow estimation of seasonal values. Composite Samples using a programmable timer (optionally) can also be supplied.