

Quality air monitoring equipment : the review of air quality monitoring equipment

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ABSTRACT

Air quality is one of the important elements in environmental monitoring such as water quality and noise level monitoring. The result from the in-situ experiment would give direct reading on current existing environment on any propose study area. Nowadays, the invention of air quality equipment is easy to be handle, hand-held, portable and convenience to bring to niche or impossible area to fits in by human. With long life battery allow it operate for 24 hours at field and many divines gases can be monitor with single head. The purpose of the study was to review the equipment that used for air quality monitoring that capable to gives real time reading, cost effective equipment and portable to monitor at site. In this study, Aeroqual Series 500 is an air quality monitoring equipment was used to monitored the PM2.5 and PM10 at three different site studies. The Series 500 air quality is portable handheld monitor and enables to give accurate real time data ether deployed for short term fixed monitoring. The site studies were selected by the environmental consultant to be reviewed. The result of the air quality was accurate in real time respond to monitor air quality. However, another factor such as meteorology condition and topography, slope gradient and land use factor need to be considered to place the equipment in order to avoid any undesirable reading and missing data.

KEYWORDS

Aeroqual; PM2.5; PM10; Air quality monitoring

REFERENCES

1. Aeroqual. (2019, November 23), Series 500-Portable Air Quality Monitor. Retrieved from <https://www.aeroqual.com>
2. Appanah, S. and Weinland, G. (1993). Planting quality timber trees in peninsular Malaysia: A review. ISBN 9839592181 .p221

3. Enviroconsult Services. (2018).
Limestone Quarry Operation, Bakpur, Mukim Hulu Lepar, Daerah Kuantan, Pahang
4. Enviroconsult Services. (2019a).
EIA report of Forest Plantation in Sungai Brok Forest Reserve in Jajahan Gua Musang, Kelantan, Malaysia
5. Malaysia Palm Oil Council. (2019, November 23)
The Oil Palm Tree.
Retrieved from <https://mpoc.org.my>