

## **Nutrient contaminant on monitoring wells in agricultural areas of Kuala Langat, Selangor**

### **ABSTRACT**

Agricultural activities have become one of the prominent contributions to the level of groundwater quality. This paper aims to draw attention to the agricultural pollutants that are associated with the groundwater deterioration. The potential parameters distributions from agricultural areas into groundwater were found to be as nitrate, nitrite, phosphate, ammonia and phosphorous. MWD5 monitoring well shows the highest nitrate concentration. The lowest nitrate concentration recorded was in BKLTW12 monitoring well where this station is located at the North of Kuala Langat Reserve Forest. The nutrients contaminants from agricultural areas were also calculated to determine the accumulation in groundwater according to the different depth of aquifers. It was found that shallow aquifer was more susceptible to pollutants from agricultural areas where the nutrients contaminant will decrease with the increasing of depth. The result shows that nitrate to be below the recommended level for raw water guidelines of Ministry of Health Malaysia except for MWD5 monitoring well. Meanwhile, only BKLTW16, and MWD5 monitoring wells shows exceeded recommended level for ammonia concentration.

**Keyword:** Groundwater; Agricultural; Nutrients