

**METAL DISTRIBUTION AND CONTAMINATION LEVEL AROUND  
SELECTED PARKING AREA**

**NURUL ASYIKIN BINTI ABD HALIM**

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## **ABSTRACT**

### **METAL DISTRIBUTION CONTAMINATION LEVEL AROUND IN SELECTED PARKING AREA**

Soil contain various types of heavy metals. Heavy metal is the natural elements that are found at various background level at a different place throughout the world due to its various concentration. Heavy metal can cause fatal effect toward human and environment if exposed in high concentration. The objectives of this study were to determine the concentration and distribution of selected heavy metal at selected parking area and to evaluate the level of heavy metal contamination based on contamination factor CF and enrichment factor EF. Heavy metals that were analyzed were Copper (Cu), Iron(Fe), Nickel(Ni), Lead (Pb) and Zinc (Zn). In this study the sample was dried in microwave and was digested by using Acid Digestion method. The sample concentration was then analyzed using Inductive Couple Plasma- Optical Emission Spectroscopy (ICP-OES). The mean concentration obtained from the whole sampling site were 19.8 and 11.1mg/kg, 5072 and 13529 mg/kg, 2.8 and 1.2 mg/kg, 9.6 and 11.1 mg/kg, 44.7 and 37.3 mg/kg for Cu, Fe, Ni, Pb, Zn in rural parking Kelantan and Pahang and for suburban Cu, Fe, Ni, Pb, Zn were 11.5mg/kg and 16.2 mg/kg, 10707 mg/kg and 8244mg/kg, 3.6 mg/kg and 1.1 mg/kg, 19.7 mg/kg and 6.7 mg/kg, 26.6mg/kg and 9.2 mg/kg respectively. In conclusion Fe have the highest concentration in both soil at rural and suburban parking area compared to Cu, Ni,Pb and Zn . Based on data obtained from the contamination factor the study area were severely contaminated with heavy metal and significantly enrich by heavy metal due to anthropogenic source.

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