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**INVESTIGATION OF POLLUTANT FLOW PATTERN IN GROUNDWATER
SYSTEM AT TAIPING MUNICIPAL SOLID WASTE (MSW) DISPOSAL SITE,
PERAK**

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ABSTRACT

Investigation of pollutant flow pattern in groundwater system has been performed at Taiping Municipal Solid Waste (MSW) disposal site, Perak. The pollutants under study included selected heavy metals such as chromium (Cr), manganese (Mn), lead (Pb), iron (Fe) and zinc (Zn). The hydrogeochemical technique was used to determine the pollutants accumulation concentration in the groundwater system whilst the colloidal borescope system was used as a supporting data to determine groundwater flow direction and flow velocity. The hydrogeochemical technique involved the sampling of groundwater at several boreholes within the study area. The study showed that the accumulation concentration of pollutants was towards southeast of the study area. The result compliment the data given by the colloidal borescope system where the groundwater flow direction was dominant towards southeast with the velocity range between $1.09-3.86 \times 10^{-4}$ m/sec.