

CHAPTER 6 : CONCLUSION

In conclusion, most of the leachate parameters of the leachate collected before and after the landfill closure were found to exceed the Standard A of Sewage and Industrial Effluent, Regulation 1979. The characteristics of the Ampang non-sanitary landfill leachate was found to be quite similar to other landfill leachates in the Klang Valley except for the high concentration of ferum. The unavailability of sanitary control system such as geotextile membrane at the base of this landfill and leachate treatment facilities had caused the leachate to contaminate surface water. Thus, leachate was found to be the main contaminant at Sungai Michu. Other sources of pollution this river are sewage contamination and garbage disposal by the nearby residents. Along the Sungai Langat, effluent discharges from the industries and ammonia pollution from the poultry farm located at the Geme river were observed to be the main pollutants. Although the quality of water at the 10th Mile Langat water intake point was unsatisfactory, the quality of the pipe water received by the residents here comply with the standard and is safe for consumption.

Although the landfill has been closed for more than one and a half years, there are still some risks of environmental hazards and pollution, mainly due to high contents of organic matter, contamination from heavy metals and other pollutants in the leachate and gas. Overall, the pollution effect of the leachate on the adjacent rivers is obvious and proper post-closure landfill site management plan must be adopted to prevent further contamination.