

1. Use municipal solid waste as an example to discuss the priorities in waste management alternatives. (20%)
2. (1)請繪圖並說明大氣中懸浮微粒之粒徑分佈特徵及其形成機制。
(2)請說明何謂 $PM_{2.5}$ 、 PM_{10} 及 TSP，又何以 $PM_{2.5}$ 較適合代表空氣品質之好壞? (20%)
3. 試列舉說明影響污染物在大氣擴散(或稀釋)之重要氣象因子。 (15%)
4. 試舉出去除或回收管道排氣中揮發性有機污染物(VOCs)之五種方法。 (15%)
5. 薄膜積垢種類、原因為何?如何控制? (15%)
6. The following questions are related to groundwater hydrology and contamination.
 - (1) Calculate the groundwater flow velocity in meter per second for a hydraulic conductivity of 10^{-6} m/sec, a hydraulic gradient of 0.02, and an effective porosity of 0.1;
 - (2) Please list five possible sources of groundwater contamination;
 - (3) Please list the major mechanisms that affect contaminants transport in the subsurface;
 - (4) Please itemize the general procedures for contaminated site investigations. (15%)