

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions should be treated carefully as they are based on the validity of assumptions associated with the techniques and employed in this study.

1) This study shows that Al is the most suitable reference element for normalizing trace metal data of sediment in Mae Klong watershed area.

2) Fe and Mn appear in crustal materials at lower concentration than Al which is the most abundant and dominant metal in Mae Klong watershed. Fe correlates with the studied trace metals at lower degree than Al while Mn does not show any relationship with trace elements.

3) Although elemental contents of shale may be used as representative of historical sediment but shale is not the most abundant rock in Mae Klong watershed and also relatively high in Al contents than limestones, the most abundance rocks in this watershed, thus making it a poor representative in this case. Therefore, the best representative is the average of every rock types in the watershed.

4) Though average Al concentration in this study is much lower than those of Taylor (1964) and Bowen (1979), but sediment enrichment factor values (SEF) of metal in sediments of the Mae Klong estuary calculated with the average obtained from this study are very similar to those calculated by using world average values (Taylor, 1964 and Bowen, 1979). This is probably because our crustal material are not only lower in Al contents than those of world average but also lower in trace contents as well.

The following studies are recommended :

1. more sampling stations, are required to further confirm the finding in this study

2. elemental composition of geological materials in Mae Klong watershed area, other than elements which are tested in this study

3. elemental composition of geological materials bordering land area, and

4. elemental composition of sediments in Mae Klong watershed area.

These studies should enable scientists to have better understanding and better database in using sediment for metal pollution impact assessment which is vital to environmental management.



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