

Title: Urban Developmental Policies Review in Malaysia

Executive summary

Malaysia is seeing rapid urbanization occurring in this country since the last 2 decades, resulted from rapid economic growth as like other countries in the Asian Region. This rapid population growth, urbanization and industrialization have greatly affected their quality of life and wellbeing of the urban population because of the deterioration in the quality of the living standard and social environment. These scenarios are also faced by many cities in the Asian Region where rapid and unplanned expansion of cities and urban areas have contributed many potential health impact situations especially when some hazardous installations or plants without HIA / EIA were located near residential and public facilities such as school, hospitals and park parks.

The task to rectify such problems is enormous and a step forward is necessary. Therefore, there is a need to review and conduct HIA / EIA on existing policies and developed audit mechanism that will safe guard public safety and protect human health from potential disaster either from hazardous situations or accidents.

Long term monitoring of such policies and early identification of policies failures should be incorporated within the HIA / EIA system so as there will be minimal health consequences affecting the public and early remedial measures taken to correct such mistakes. Such mechanism needed strong political support and commitment especially by the cities administrators and the multi government agencies.

Key word: Urbanization, health impact, policies

Introduction

Malaysia has been experiencing rapid urbanization and industrialization stimulated by appropriate economic policies which supported and facilitated industrialization. Under the Malaysian legal system, ENVIRONMENTAL QUALITY ACT 1974 [ACT 127] where Environmental Impact assessment was enforced in 1st April 1988, the overall aim was to ensure the impact on the environment from developmental projects proposed by the public and private sectors will be adequately evaluated and assessed. The objectives of environmental impact assessment are:

- To examine and select the best from the project options available;
- To identify and incorporate into the project plan appropriate abatement and mitigating measures;
- To predict significant residual environmental impacts;
- To determine the significant residual environmental impacts predicted; and
- To identify the environmental costs and benefits of the project to the community.

Environmental Impact Assessment (EIA) essentially is a planning tool for preventing environmental problems from occurring and to avoid costly mistakes in project implementation, either because of the

environmental damages that are likely to arise during project implementation, or because of modifications that may be required subsequently in order to make the action environmentally acceptable.

Although EIA was incorporated in the process of approving developmental projects, we do see many projects implemented facing serious environmental problems and health issues. Therefore, some serious considerations have to be incorporated in policies approving such projects which have resulted many suffering among the public especially with regards to their health and wellbeing.

Case study 1

Land Clearance for agriculture activities



Picture 1: 4 Kilometers square areas of Land Clearances for Sanitary landfill in Selangor.

Land clearances for development are under the preview of the Department of Environment and this project was approved for development after an extensive detail Environmental Impact Assessment conducted. But as enclosed in the picture 1, it was noted that there was no proper mitigation measures in place to protect the affected environment. This was noted by the extensive pollution of the river and neighboring ponds. This river provided raw water supply for drinking water for 3 million populations. There are potentials for pollution in this raw water to cause problems to the treatment plant downstream and affected the continuity of water supply to the people in the region which will directly affect the health and well being of the affected population. When the Sanitary landfill is fully operational, there will be huge potential for the river be polluted by the sanitary land-filled although

strict criteria will be enforced especially during heavy downfall or failure of the leachate oxidation ponds. This will cause the water treatment plant downstream will incur high cost of maintenance and protecting the safe drinking water quality. Failure to do so or early identifying of contravention from the sanitary landfill will cause exposure of hazardous pollutant to the general population especially to highly ill and sensitive group of people.

Case 2

Cement factory in the near residential areas



Picture 2: A cement factory located close to residential areas

Planned development is the crucial policy areas which need to be continuously developed and evaluated especially at local government. As cities expanded, some existing industries which were appropriate at a particular time may not be appropriately located during the present or future time. Therefore, policy maker must be made aware of such instances and plan for closure and relocation if such eventualities occurred. Relocation plans should have been planned early so that there will be minimal losses incurred to all affected parties. Due to lack of understanding about health risk and community need, many local governments were not prepared to plan and undertake appropriate measures to alleviate and reduce communities fears and advised appropriately to major industries to plan for closure and relocation program.

Cement factory which is located too close to the residential areas and town will create public outcry because of the fear affecting their health especially from dust and fine particulate produced by the cement plant. The dust and fine particulate less than 2.5 micron will eventually cause some breathing difficulty and respiratory diseases and increase health cost and wellbeing of the resident.

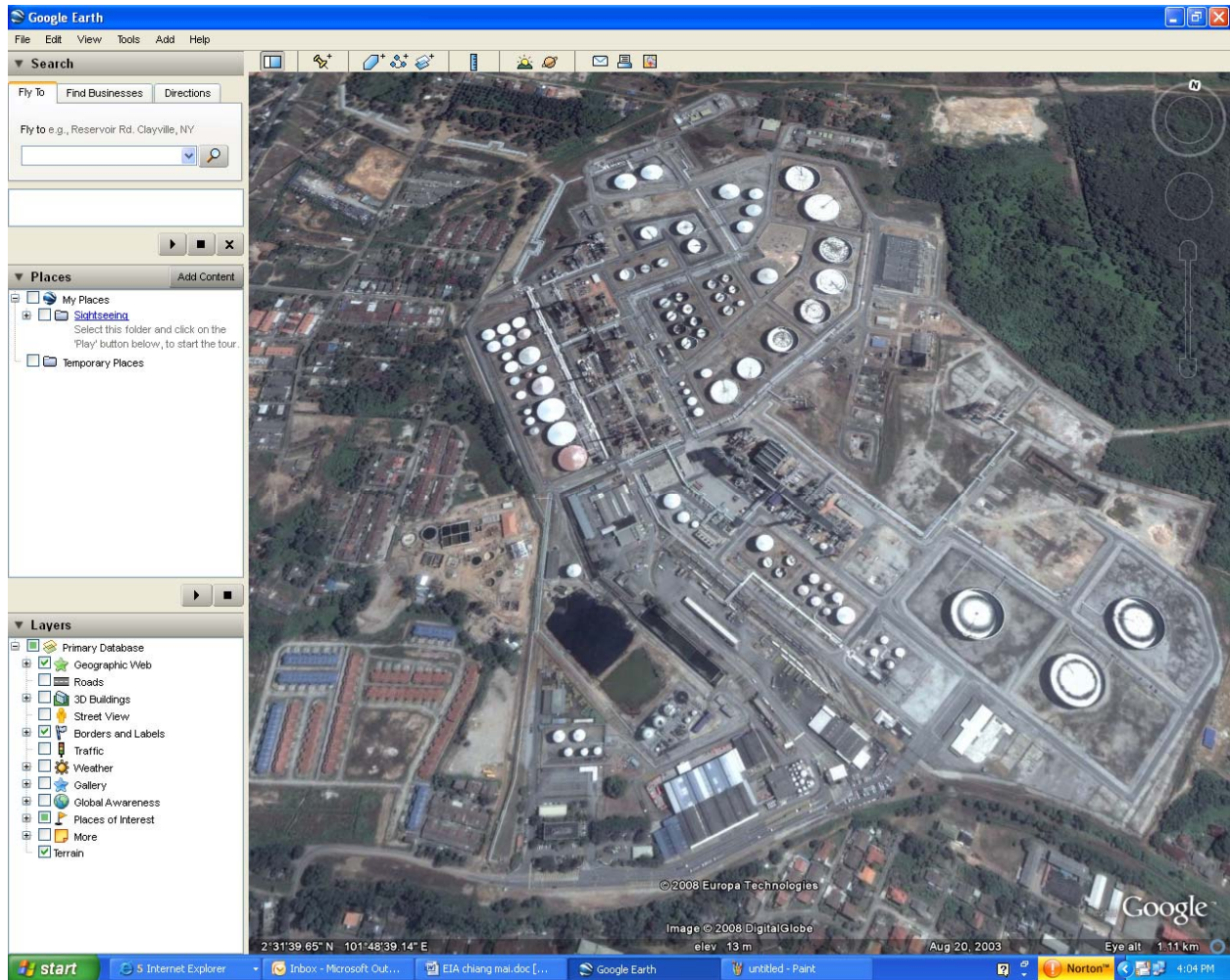
Case 3



Picture 3: Chemical installation in urban areas and highways

Installation of certain buffer zone is necessary to ensure any hazardous plant of chemical installation should be within a reasonable distant from any residential areas or highways or high density. Town planners, Economic planners and Department of Environment should have high degree of suspicion if such installations were planned or erected because of the potential of explosion and fires from such plants. Certain policy should be made available to ensure compliance to certain safety standards should be made to adhere by the company. Besides this, emergency response planned should be made available to ensure public and community is aware of the potential and the means to escape if any eventualities will occur. Therefore, existing hospital and fire department should be made aware the potential hazards available with their area of operation and understand the potential risk to the general public.

Case 4



Picture 4: Petroleum products depot

Petroleum product depot is always a high risk area and any residential or factory located close to such plant will be at high risk. As noted in the picture above, the petroleum depot sites and the route of petrol lorry tankers will be a potential hazard to the residential living to the route or site of the petroleum. Therefore they must be made aware of the risk and public education should be incorporated for the families living closed to the site.

Case 5



Picture 5: Land reclamation for development

Although land reclamation seems to be less harmful to the health and wellbeing of the affected population but if detail health assessment being conducted, the affected population will be suffering more especially due to loss of income and resulted in malnutrition. Therefore, in any development planned for a particular area, health impact assessment should be routine done and the process of elimination and identification of potential health impact should be conducted before decision is make to excluded health assessment being conducted.

The Process

The EIA procedure adopted in Malaysia consists of three major steps. The steps in the EIA procedure are as follows:

- **Preliminary assessment** of all prescribed activities;
- **Detailed assessment** of those prescribed activities for which significant residual environmental impacts have been predicted in the preliminary assessment;
- **Review of assessment reports;**
- **Preliminary Assessment**
The objectives of Preliminary Assessment for prescribed activities are: to examine and select the best from the project options available. to identify and incorporate into the project plan appropriate abatement and mitigating measures, to identify significant residual environmental
- Preliminary EIA Report - 5 weeks
- Terms of Reference (TOR) for the preparation of Detailed EIA Report - 4 weeks
- Detailed EIA Report - 12 weeks

The DOE maintains a list of experts who may be called upon to sit as members of any Review Panel established. The selection of the experts depends on the areas of environmental impacts to be reviewed.

Health Impact Assessment

- Legally, "Environmental Impact Assessment" was defined as: The process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made."
- "A Handbook of Environmental Impact Assessment Guidelines" and EIA guidelines for specific activities published by the Department of Environment noted that environment impact means the net change (good or bad) in man's health and well-being, including the ecosystems on which man's well-being depends, that results from an environmental effects.

Therefore, some health issues were predetermined within the Environmental Impact Assessment and need to be further strengthened especially with lack of adequate understanding between causal effects relationships between development and health.

Health discipline should be looked into in detail before exclusion of health parameter in conducting EIA. The person entrusted to such assessment must be experienced enough to identify potential health impact from such projects. Therefore checklist which highlighted and determined potential health outcomes from the projects should be made available and extensively analyzed so that appropriate decision should be made correctly.

The checklist should incorporated potential health risk as below:-

1. Physical safety
Risk from injury to the employees and general public such as from accidents and explosion resulted in fractures, burnt and deaths.
2. Psychological well-being
The perceived threat their life and their families from the plants in insomnia, depress, anger and psychological disturbance. The presence of many foreign labors will create feeling of insecurity from crime and social problems.
3. Infectious diseases
the threat from infectious diseases such as vector borne diseases, parasitic diseases and water borne diseases.
4. Non infectious diseases
Diseases related with air borne from particulate matter or radiations such as respiratory diseases, cancer and heart diseases from stress.
5. Physiological Diseases
Diseases related with lack or shortage of basic needs of the affected people from food, sleep, jobs, shelter and water supply because of the project. This will lead to malnutrition, poor growth, crime rate and poor health.

The DOE which maintains a list of experts who may be called upon to sit as members of any Review Panel established should discussed with health panels before making decision and excluded a particular project will not caused any health effect and well-being of the population.

The selection of the experts health panel shall ensure those panel had adequate experiences in public health and be able to identify potential health risk and suggest current and appropriate mitigation measures to minimize health risk to the affected population.

In Conclusion

Policy in Health Impact Assessment within Environmental Impact Assessment will reduce bureaucracy in processing developmental projects in Malaysia but it will also cause potential policy and decision errors which will have massive health consequences. Depend on the level of knowledge; adequate understanding and experiences of the officers handling such task will prevent potential health consequences. With the current standard and handling of the developmental project, it is noted that there are still many weakness within the Department of Environment in handling health impact assessment. Therefore, continuous training, discussions and research in health impact studies should be formulated and strengthened to ensure mistakes and errors are minimized.

References:

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