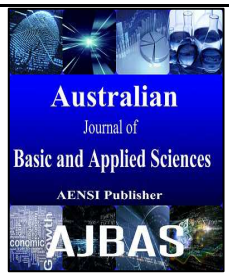
ISSN:1991-8178

Australian Journal of Basic and Applied Sciences

Journal home page: www.ajbasweb.com



Legal Provisions on Environment Impact Assessment (EIA) Requirements and Land Reclamation: Malaysian Perspective

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ARTICLE INFO

Article history:
Received 3 October 2015
Accepted 10 October 2015
Published Online 13 November 2015

Keywords:
Land reclamation, EIA, environment

ABSTRACT

The pace of development in some areas is so fast causing certain areas are scarce for land. In order to meet the growing demands for land, in Malaysia particularly, the authority started to reclaim land from seabed to provide opportunity for further development. Obviously, this process needs to be regulated to protect the right of the government, public and the environment. Accordingly, there is no specific Act in Malaysia regulating land reclaimation activities. The main reference for land reclamation law in Malaysia is National Land Code (1965), which unfortunately, does not widely discuss this subject with a number of uncertainties. In relation to environmental aspects, Environmental Quality Act (1974) regulates matters, inter alia, on land reclamation activities. This paper will looks at the sufficiency of Environmental Quality Act (1974) with regards to environmental protection in land reclaimation projects.

To Cite This Article: Zul Zakiyuddin Ahmad Rashid, Abdul Aziz Hussin, Syarmila Hany Haron., Legal Provisions on Environment Impact Assessment (EIA) Requirements and Land Reclamation: Malaysian Perspective. ***Aust. J. Basic & Appl. Sci.,*** *9(34): 32-35, 2015*

INTRODUCTION

Land reclamation is part and parcel of development activities. This is evidenced by a number of land reclamation activities been conducted all over the world, as land for development becoming limited. Land reclamation is a process to create new land from the sea. As been highlighted by Ge Yu & Jun-yan (2011), reclamation of marine is the important utilization of ocean for mankind to produce goods and provide living space for human. Nevertheless, Yu Ge & Jun-yan (2011) further added that the reclamation materials and pollutants generated during the reclamation activities pollute the marine environment. This problem is also known to affect the fisheries activities. At some extent pollution can be controlled, but the ecological and environmental impacts of reclamation cannot be restored.

Basic example of vast land reclamation project is the Port of Rotterdam in the Netherlands, Changi airport in Singapore which was built with over 40 million cubic metres of sand reclaimed from the seabed, using 7 cutter suction dredgers working 24 hours a day, Kansai airport near Osaka, Japan and the New Doha International Airport in Qatar (Kolman, 2012). Technically, land reclamation is the process of claiming back submerged land from water bodies like oceans, sea, bays and rivers (Gupta and Chandra, 2001). The first major land reclamations were done in the 1970s, when the Port of Rotterdam in the Netherlands was extended with sand suppletion from the sea with the first Maasvlakte reclamation. This extension allowed the port to continue to develop and to accommodate more ships and it helped Europoort to add container terminals and become the largest in Europe at the time, providing jobs and stimulating the economy without infringing upon an already congested city.

Land reclamation has played a significant role in the urban development process in the coastal areas of many maritime countries. Population growth typically demands more area for development and infrastructure. Many maritime countries such as Hong Kong, Japan, Singapore, South Korea and the Netherlands regard land reclamation as an important path to solve scarcity of land. The Netherlands is noted for reclaiming land from the ocean. It has wrested almost half of its working and living area from the sea over seven hundred years. In Japan, reclamation of its coastal regions has been vigorously pursued for hundreds of years. For example, it has used the technique to create the industrial hub beside Tokyo harbor and Osaka's Kansai Airport. Hong Kong also has a long history of creating urban land by reclamation. Reclaimed lands account for 5.47% of its total land area in 1997. Besides that, land reclamation in Singapore started in the 19th century.

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Initially, soils excavated from inland hills and sand dredged from surrounding seabed were used to reclaim the sea, such as the Telok Ayer Reclamation from 1879 to 1887 and the East Coast Reclamation of 1418 hectares from 1961 to 1985 (Wei, 1983). Therefore, land reclamation has become an integral part of Singapore's development.

The same situation prevails in Malaysia, especially in Penang. Penang or Pulau Pinang is located on the north-west coast of Peninsular Malaysia. It is famous among tourist as an attractive island and a modern developed city. Penang has experienced rapid development as a result of positive economical growth. The demand of urban development and infrastructure has increased accordingly with the population growth in the state. As a result, scarcity of land has become one of the main problems in Penang especially in the northeast part of the island. Although land reclamation is an option, it is not enough to quench the thirst for land. Among prominent land reclamation projects approved by Penang State Government was residential and commercial development at Tanjung Tokong Land Reclamation Project (Ramly, 2008). As in 2010, the district allocates 17,335 persons. The Tanjung Tokong Land reclamation project which begin on 2004, seems to be strategically located in relation to its proximity to the urban commercial centre in Georgetown, the recreational areas at Batu Ferringhi and Telok Bahang Recreational Park. In addition, the projects located at the interface between the urban commercial land uses demarcated in Georgetown and its outskirts to the south and the recreational area to the north. Because of its unique locality, it has a potential in creating new mixture of socio-economic activities meshed appropriate together when the new township fully developed in the future (ERINCO, 1993).

Problem statement:

While land reclamation is required to cope with the demand of development, such activity carries with it unfavorable impact to the environment. According to Mostafa (2012) one aspect of land reclamation is dredging large amounts of sea sand transported over considerable distances to create a new land for industrial or infrastructure purposes. Jensen and Mogensen (2000) indicated that potential effects of dredging on the marine environment include effects of the dredging process and disposal process. The reclamation site and dredging site both undergo biological, physical and chemical impacts. Dredged material may cause suspended solids during dredging as a result of substratum disturbance and during transport to the surface, overflow from barges or leakage from pipelines during transport between dredged and disposal sites. Dredging may affect the physical environment by changing the bathymetry, current velocity and wave conditions.

With unfavorable side effect of land reclamation to the environment, it is important for the activity to be properly regulated. Unfortunately, there are no specific laws governing land reclamation in Malaysia. As far as reclaimed land is concerned, there is no specific law in Malaysia to regulate this matter. Provisions of the National Land Code (NLC) will be the sole status that shall be referred to when discussing issues on reclaimed land. On the other hand, there are sets of statutes that indirectly related to land reclamation: in particular under the Coastal Management Plan that relates to environmental protection. This would include the Environmental Quality Act 1974, Land Conservation Act 1960, National Park Act 1980 and Fisheries Act 1985. (Azlinor Suffian & Maizatun Mustafa, 2010). Not to forget, it also involve several land matters under National Land Code 1965, planning matters (Town and Country planning Act 1976), local authority's jurisdictions and powers (Local Government Act 1976 and Street, Building and Drainage Act 1974, among athers. With regards to Environmental Quality Act 1974, the Preamble of the Act states that the Act is "relating to the prevention, abatement, control of pollution and enhancement of the environment, and for purposes connected therewith." It contains specific Part or provisions in respect to prohibitions and control of pollution of the soil, inland waters and discharge of wastes into Malaysian waters. Accordingly, this paper intended to evaluate the sufficiency of the legal provisions available, in particular the Environmental Quality Act 1974.

The Environmental Quality Act 1974:

According to the third Malaysia Plan, the most important legislation enacted as a mechanism to implement the directives of environmental policy in Malaysia is the Environmental Quality Act 1974.

This Act has developed ever since to cater the needs for environmental protection. Initially, the Environmental Quality Act 1974 relied mainly on curative and remedial strategies for the purpose of environmental protection. Subsequently, it was realised that these strategies alone were not sufficient to deal with environmental issues faced by Malaysia. Different strategies needed to be introduced especially those that could cater for both economic and environmental needs without jeopardizing any of them (Mustafa, 2011).

The Environmental Quality (Amendment) Act 1985, amended the Environmental Quality Act, 1974. Amendments include the insertion of section 34A which requires any person intending to carry out any prescribed activity to submit report on the impact on the environment to the Director of Environmental Quality for examination. In 1988, the environmental impact assessment (EIA) requirement for prescribed activities was given legal recognition through one of it subsidiary legislations known as Environmental Quality (Prescribed Activities) (Environmental

Impact Assessment) Order 1987 which come into force on the 1st April 1988 (P.U.(A) 362/87). It was introduced in exercise of the powers conferred by section 34A of the Environmental Quality Act 1974 (Sixth Malaysia Plan 1991-1995).

According to Environmental Impact Assessment (EIA) Procedure and Requirements in Malaysia (2007) published by Department of Environment Ministry of Natural Resources & Environment, Malaysia, EIA is a study to identify, predict, evaluate and communicate information about the impacts on the environment of a proposed project and to detail out the mitigating measures prior to project approval and implementation. The EIA is an important phase in the process of deciding about the final shape of a proposed project. It helps officials make decisions about a project and it helps the project proponents achieve their aims successfully, under the following pretexts:

1. A project that has been designed to suit the local environment is more likely to be completed on time and within budget, and is more likely to avoid difficulties along the way.
2. A project that conserves the natural resources it relies upon will continue to be sustained by the environment for years to come.
3. A project that yields its benefits without causing serious environmental problems is more likely to bring credit and recognition to its proponents.

In summary, an Environmental Impact Assessment:

- predicts the likely environmental impacts of projects;
- finds ways to reduce unacceptable impacts and to shape the project so that it suits the local environment in a sustainable manner; and
- presents these predictions and options to decision maker.

What is equally significant is that the implementation of Environment Impact Assessment (EIA) is meant to promote Malaysia's policy objective of sustainable development which is the core thrust of Malaysia's environmental policy (Sixth Malaysia Plan 1991-1995).

EIA Requirement under Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987

Activities subjected for EIA are listed in Environmental Quality (Prescribed Activities) (Enviromental Impact Assessment) Order 1987. This include activities related to land reclamation. According to the Environmental Quality (Amendment) Act 1985, if the reclamation area exceeding 50 hectares, it was included in the classification "prescribed activity" and list development work or certain activities as defined by the Environmental Quality (Prescribed Activities)(Environmental Impact Assessment) Order 1987. The report of the EIA must be submitted and approved by the Department of the Environment prior to the implementation of the work the physical process of land reclamation. Further to this, the magnitude of the proposed reclamation projects by state governments to make progress with the development of various in adjacent areas now have a macro EIA covers a total area proposed for a better perception of cumulative effects. Any contravention to section 34A carries certain penalty. According to section 34A subsection (8), any person who contravenes this section shall be guilty of an offence and shall be liable to a fine not exceeding one hundred thousand ringgit or to imprisonment for a period not exceeding five years or both and to a further fine one thousand ringgit for every day that the offence is continued after a notice by the Director General requiring him to comply with the act specified therein has been served upon him.

EIA Requirements and Land Reclamation:

Land reclamation can have negative impacts on the coastal and marine environment. According to OSPAR Commission (2008), the EIA summary reports (Port of Rotterdam, 2007a and b) of the Maasvlakte 2 project in the Netherlands for example identified various impacts of this project on marine species and habitats including the permanent loss of protected habitats, significant negative effects on the common tern and black duck, changes in coastal currents, increased noise and reduced air quality (increased NO2, SO2 and PM10 concentrations) during the construction phase as well as adverse effects on benthos organisms and habitats from sand extraction, elevated fine silt concentrations. The reclaimed land will also reduce coastal fishing grounds, mainly for local fishermen.

Therefore it is essential to evaluate and asses those impacts and take actions that reduce the negative consequences. EIA is an important tool to achieve this prupose. Nevertheless, to what extent Malaysian Laws correspond to this need? From the provisions of the Environmental Quality (Amendment) Act 1985, only reclamation project exceeding 50 hectares is required for EIA report, as it was included in the classification of prescribed activities as defined by the Environmental Quality (Prescribed Activities)(Environmental Impact Assessment) Order 1987. Accordingly, what happened to projects with the size lesser than 50 hectares. Strict interpretation of the legal requirement indicates that no EIA report is required for project smaller than 50 hectares, though the effect can be as devastating as land reclamation projects exceeding 50 hectares. In comparison to EIA requirement based of project size, under the European Union (EU) legislation, screening is required by Article 4 EIA Directive 2011/92/EU in determining whether EIA to be required or not. In defining the requirement for screening, European Commission during 2012 Workshop on EU Legislation

Environmental Impact Legislation: Screening Stage under the EIA Directive confirmed that Article 4(2) of the Directive, account must be taken of all the characteristics of a project, not the single factor of size or capacity. This was originally the judgment of the Court (Fifth Chamber) of 21 September 1999 in the case between Commission of the European Communities v Ireland on assessment of the effects of certain projects on the environment and failure to take into account the nature, location and cumulative effect of projects to constitute a failure to fulfil obligations.

Referring to the comparison above, it is submitted that Malaysian law can be further improved, especially on the requirement for EIA in land reclamation projects. Other jurisdictions on similar issues can always be referred to, as in the approach taken by the European Union (EU) on EIA requirements.

Conclusion:

Malaysian law ha been progressive, particularly in matters related to the protection of the environment. This is evidenced from the introduction of environmental laws in the country, and further developments of the laws throughout the years. Nevertheless, the laws can be further improved, as in the matters related to land reclamation. The requirement for EIA can be made more inclusive as compared to the current provisions on project size per se. A properly conducted EIA will benefit the project, the country and the environment as a whole.

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