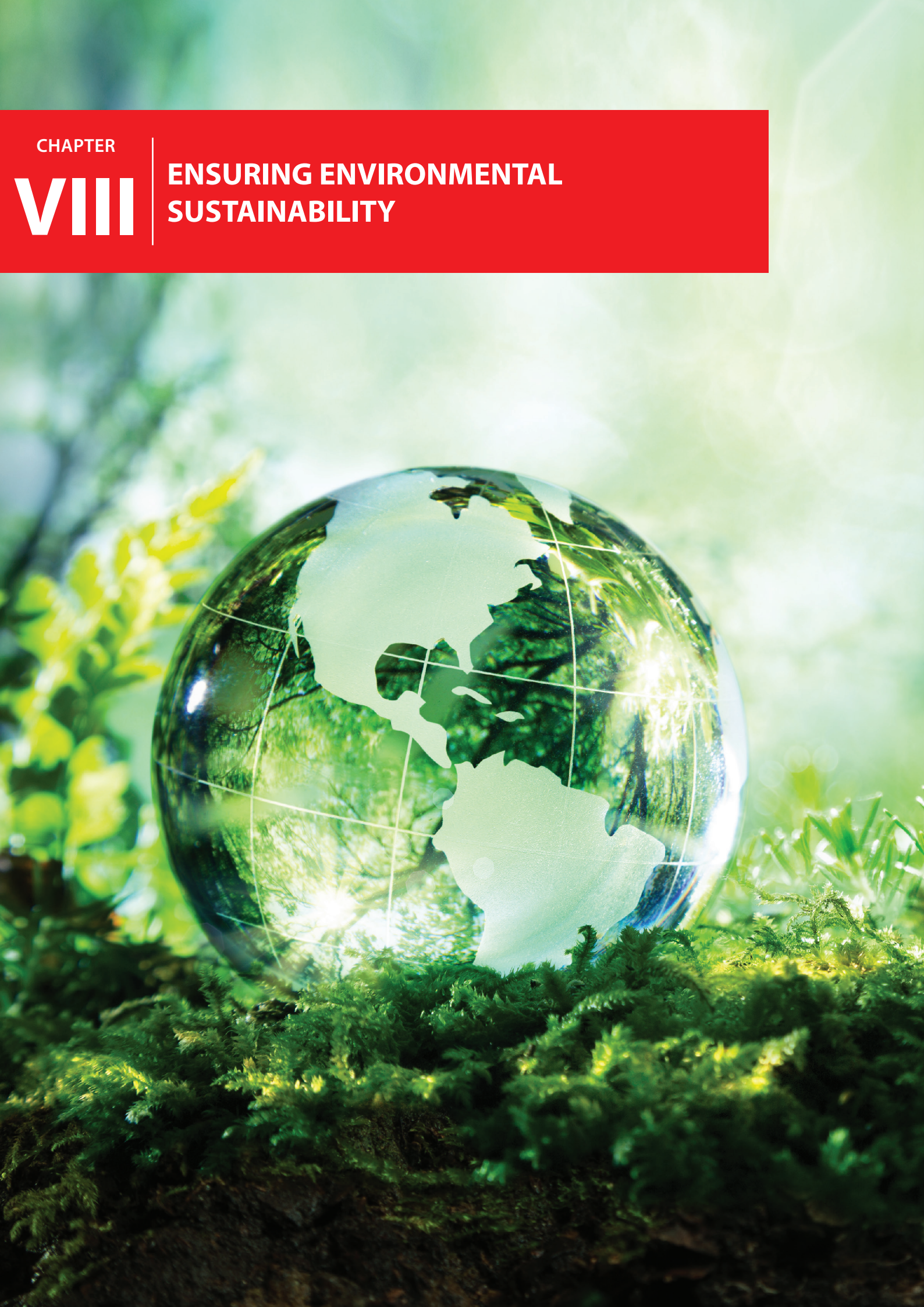
CHAPTER

VIII

ENSURING ENVIRONMENTAL SUSTAINABILITY



CHAPTER VIII

ENSURING ENVIRONMENTAL SUSTAINABILITY

To promote environmentally-sound and sustainable development, the Malaysian Government has established a legal and institutional framework for environmental protection. Investors are encouraged to consider environmental factors during the early stages of their project planning. Aspects of pollution control include possible modifications in the process line to minimise waste generation, viewing pollution prevention as part of the production process, and focusing on recycling options, including the inculcation a self-regulation culture throughout the business.

Environmental protection is overseen by the Department of Environment (DOE) under the Ministry of Natural Resources, Environment and Climate Change (NRECC). Businesses should refer to Malaysia's DOE for more information on procedures and guidance on how to ensure that their projects are environmentally sound and sustainable.

1. POLICY

The National Policy on the Environment (DASN) has been established for continuous economic, social, and cultural progress, and enhancement of Malaysians' quality of life, through environmentally-sound and sustainable development. The objectives of DASN are to achieve:

- A clean, safe, healthy, and productive environment for present and future generations;
- Conservation of the country's unique and diverse cultural and natural heritage, with effective participation by all sectors of society; and
- Sustainable lifestyles and patterns of consumption and production.

There are eight (8) principles listed under DASN to harmonise economic development goals with environmental imperatives:

- Stewardship of the Environment;
- Conservation of Nature's Vitality and Diversity;
- Continuous Improvement in the Quality of the Environment;
- Sustainable Use of Natural Resources;
- Integrated Decision-Making;
- Role of the Private Sector;
- Commitment and Accountability; and
- Active Participation in the International Community.

DASN seeks to integrate environmental considerations into development activities, and in all related decision-making processes, to foster long-term economic growth and human development, as well as to protect and enhance the environment. It complements and enhances the environmental dimensions of other national policies, such as those on forestry and industry, and takes cognisance of international conventions on global concerns.

2. ENVIRONMENTAL REQUIREMENTS

The Environmental Quality Act 1974 and its accompanying regulations call for Environmental Impact Assessment (EIA), site suitability assessment, pollution control assessment, monitoring, and self-regulation in compliance. Industrial activities are required to obtain the following approvals from the Director General of Environmental Quality prior to project implementation:-

- EIA for Prescribed Activities;
- Written notification to construct any facility to result in a new source of discharge of industrial effluent or mixed effluent and a new source of emission; and
- Written Permission and Licence to construct, occupy, and operate prescribed premises and prescribed conveyances.

2.1 EIA for Prescribed Activities

An investor should first of all check whether an EIA is required for his/her proposed industrial activities. An EIA study normally forms a second-level approval necessary to obtain Project Approval under evaluation by the Project Approving Authority. The EIA Approval obtained for a project is then to be submitted to the Project Approving Authority via the One-Stop Centre (OSC), together with other approval requirements of related technical agencies. The following are activities prescribed under the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015, which require an EIA.

FIRST SCHEDULE

1. Agriculture:

(a) Land development schemes covering an area of 20 hectares or more but less than 500 hectares to bring forest into agricultural production.

(b) Development of agricultural estates covering an area of 500 hectares or more involving changes in types of agricultural use.

2. Aerodrome:

Expansion of an aerodrome involving a runway of 1,000 metres or longer.

3. Drainage and Irrigation:

(a) Construction of man-made lakes and enlargement of artificial lakes with surface areas of 100 hectares or more.

(b) Irrigation schemes covering an area of 500 hectares or more.

4. Fisheries:

Land based aquaculture projects accompanied by clearing of mangrove forest, peat swamp forest or fresh water swamp forest covering an area of 20 hectares or more but less than 50 hectares.

5. Forestry:

(a) Conversion of forest at 300 metres or more above mean sea level to other land use, covering an area of 20 hectares or more but less than 100 hectares.

(b) Logging, or cutting or taking of timber for the purpose of conversion from forest to other land use, covering an area of 100 hectares or more but less than 500 hectares.

(c) Logging, or cutting or taking of timber from forest at less than 300 metres above mean sea level covering an area of 100 hectares or more, outside permanent reserved forest.

(d) Conversion of an area of —

(i) mangrove forest;

(ii) peat swamp forest; or

(iii) fresh water swamp forest

for industrial, housing or agricultural use, covering an area of 20 hectares or more but less than 50 hectares.

(e) Development of planted forest covering an area of 100 hectares or more but less than 500 hectares.

6. Industry:

(a) Chemical:

Production capacity of each product or combined products of 100 tonnes or more per day.

(b) Cement:

Cement grinding plant with cement production capacity of 200 tonnes or more per day.

(c) Lime

Production of 100 tonnes or more per day of burnt lime using rotary kiln or 50 tonnes or more per day of burnt lime using vertical kiln.

(d) Petrochemicals:

Production capacity of each product or combined product or less than 50 tonnes per day.

(e) Shipyards:

Dead weight tonnage of 5,000 tonnes or more.

7. Land Reclamation:

Coastal reclamation or land reclamation along river banks involving an area of less than 50 hectares.

8. Mining:

(a) Processing activities outside mineral tenement area, including concentrating of aluminium, copper, gold, iron, tantalum or rare earth element.

(b) Sand mining on land or river or in coastal area or in territorial waters not exceeding three (3) nautical miles measured from the low-water line, involving an area of 20 hectares or more.

(c) Sand mining in continental shelf area.

9. Petroleum:

(a) Development of —

(i) oil field;

(ii) gas field; or

(iii) oil and gas field.

(b) Construction of 30 kilometres or more in length of —

(i) off-shore pipelines;

(ii) on-shore pipelines; or

(iii) off-shore pipelines and on-shore pipelines.

(c) Construction of —

(i) oil separation, processing, handling and storage facilities;

(ii) gas separation, processing, handling and storage facilities; or

(iii) oil and gas separation, processing, handling and storage facilities.

(d) Construction of product depot for the storage of petrol, gas or diesel which has the combined storage capacity of 60,000 barrels or more (excluding service station) within three (3) kilometres from any commercial, industrial or residential area.

10. Ports:

(a) Expansion of port involving an increase of 50% or more in handling capacity per annum.

(b) Expansion of fishing port involving an increase of 50% or more in fish landing capacity per annum.

11. Power Generation and Transmission:

(a) Construction of steam generated power station using fossil fuel (other than coal) and having the capacity of 10 megawatts or more, with or without transmission line.

(b) Construction of combined cycle power station, with or without transmission line.

(c) Construction of transmission line in environmentally sensitive area.

12. Development in Coastal and Hill Areas:

(a) Construction of building or facilities with 80 rooms or more in coastal area.

(b) Construction of hill-station resort or hotel at 300 metres or more above mean sea level covering an area of 20 hectares or more.

13. Development in Slope Area:

Development or land clearing less than 50% of an area with slope greater than or equal to 25 degree but less than 35 degree.

14. Waste Treatment and Disposal:

(a) Scheduled waste:

(i) Construction of recovery plant (off-site).

(ii) Construction of wastewater treatment plant (off-site).

(iii) Construction of storage facility (off-site).

(b) Solid waste:

(i) Construction of composting plant.

(ii) Construction of recovery plant or recycling plant.

(c) Sewage:

(i) Construction of sewage treatment plant with 20,000 population equivalent or more.

(ii) Sludge treatment facilities.

15. Dredging:

(a) Capital dredging.

(b) Disposal of waste dredged materials.

16. Housing:

Housing development covering an area of 50 hectares or more.

17. Industrial Estate Development:

Development of industrial estate covering an area of 20 hectares or more.

18. New Township:

Construction of new township consisting of 2,000 housing accommodation units or more or covering an area of 100 hectares or more.

19. Quarry:

Quarrying of rock material.

20. Road:

(a) Construction of expressway.

(b) Construction of highway.

(c) Construction of road, tunnel or bridge traversing or adjacent or near to environmentally sensitive areas.

21. Water Supply:

Groundwater development for industrial, agricultural or urban water supply of 4,500 cubic metres or more per day.

SECOND SCHEDULE

1. Agriculture:

(a) Land development schemes covering an area of 500 hectares or more to bring forest into agricultural production.

(b) New pig farming area of 2,000 or more standing pig population.

2. Aerodrome:

(a) Construction of a new aerodrome involving a runway of 1,000 metres or longer.

(b) Construction of aerodrome in or adjacent or near to any state park, national park, national marine park, island surrounding marine park or environmentally sensitive area.

3. Drainage and Irrigation:

(a) Construction of man-made lakes and artificial enlargement of lakes with surface areas of 50 hectares or more in or adjacent or near to environmentally sensitive area.

(b) Any drainage of wetland, wild-life habitat or of dry inland forest covering an area of 20 hectares or more.

4. Fisheries:

Land based aquaculture projects accompanied by clearing of mangrove forest, peat swamp forest or fresh water swamp forest covering an area of 50 hectares or more.

5. Forestry:

(a) Conversion of forest at 300 metres or more above mean sea level to other land use, covering an area of 100 hectares or more.

(b) Logging or conversion of forest to other land use within —

(i) a catchment area of reservoirs used for municipal water supply, irrigation or hydro-power;

(ii) an area adjacent or near to any state park, national park or national marine park;

(iii) any state park, national park or national marine park; or

(iv) an area gazetted as water catchment forest under the National Forestry Act 1984 [Act 313].

(c) Logging or cutting or taking of timber from forest at 300 metres or more above mean sea level covering an area of 100 hectares or more, outside permanent reserved forest.

(d) Logging or cutting or taking of timber covering an area of 500 hectares or more.

(e) Development of planted forest covering an area of 500 hectares or more.

(f) Conversion of an area of —

(i) mangrove forest;

(ii) peat swamp forest; or

(iii) fresh water swamp forest

for industrial, housing or agricultural use, covering an area of 50 hectares or more.

(g) Clearing of mangrove forest, peat swamp forest or fresh water swamp forest on islands adjacent to any national marine park.

6. Industry:

(a) Non-ferrous:

(i) Primary smelting aluminium (all sizes).

(ii) Primary smelting copper (all sizes).

(iii) Primary smelting of other non-ferrous (producing 50 tonnes product or more per day).

(b) Cement:

With clinker production capacity of 30 tonnes or more per hour.

(c) Iron and steel:

(i) Using iron ore as raw materials for production of 100 tonnes or more per day.

(ii) Using scrap iron as raw materials for production of 200 tonnes or more per day.

(d) Petrochemicals:

Production capacity of each product or combined product of 50 tonnes or more per day.

(e) Pulp, or pulp and paper:

Production capacity of 50 tonnes or more per day.

(f) Recycle paper industry:

Production capacity of 50 tonnes or more per day.

7. Land Reclamation:

(a) Coastal reclamation or land reclamation along river banks involving an area of 50 hectares or more.

(b) Coastal reclamation or land reclamation along river banks within or adjacent or near to environmentally sensitive areas.

(c) Reclamation for man-made island.

8. Mining:

(a) Mining of minerals in new areas involving large scale operation.

(b) Mining of minerals within or adjacent or near to environmentally sensitive area.

9. Petroleum:

(a) Construction of oil refineries.

(b) Construction of gas refineries.

(c) Construction of oil and gas refineries.

10. Ports:

(a) Construction of a new port.

(b) Construction of a new fishing port.

11. Power Generation and Transmission:

(a) Construction of coal fired power station and having the capacity of 10 megawatts or more with or without transmission line.

(b) Construction of nuclear-fuel power station with or without transmission line.

12. Development in Coastal Area, National Park and State Park:

Development of tourist facilities, recreational facilities or other facilities:

(a) in any national park or state park; or

(b) on any island in surrounding waters which has been gazetted as a national marine park or marine reserve under the Fisheries Act 1985 [Act 317].

13. Development in Slope Area:

(a) Development or land clearing of 50% or more of an area with slope greater than or equal to 25 degree but lesser than 35 degree.

(b) Construction of road, tunnel or bridge traversing an area with slope greater than or equal to 35 degree.

14. Waste Treatment and Disposal:

(a) Scheduled waste:

(i) Construction of thermal treatment plant.

(ii) Construction of off-site recovery plant for lead acid battery wastes.

(iii) Construction of off-site recovery plant or treatment facility that generates significant amount of wastewater which is located at the upstream of public water supply intake.

(iv) Construction of secure landfill facility.

(b) Solid waste:

(i) Construction of thermal treatment plant.

(ii) Construction of sanitary landfill facility.

(iii) Construction of transfer station.

15. Construction of Dam:

(a) Construction of dam or impounding reservoir for the purpose of irrigation, flood mitigation, control of siltation, recreational, water supply or any other reason with a surface area of 100 hectares or more.

(b) Dam and hydro-electric power scheme with either or both of the following:

(i) dam of 15 metres or more in height and ancillary structures covering a total area of 40 hectares or more;

(ii) reservoir with a surface area of 100 hectares or more.

16. Transportation:

(a) Construction of new routes or branch line for a mass rapid transport project.

(b) Construction of new railway route or railway branch lines.

17. Radioactive Materials and Radioactive Waste:

Any activity specified in this Schedule and the First Schedule using radioactive materials and generating radioactive waste.

Submission Stage of Environmental Impact Assessment (EIA) Report:

(i) Submission of TOR for endorsement (for activities that fall under Second Schedule).

(ii) Submission of EIA Report for approval (for activities that fall under First Schedule or Second Schedule).

Both documents must be prepared by a qualified person (Registered EIA Consultant with DOE) and shall be in accordance with the guidelines prescribed by the Director General of Environment and other relevant guidelines published by other agencies. The Environmental Impact Assessment Guideline in Malaysia 2016 has been prepared to assist project proponents to understand the objectives of the EIA, procedures for carrying out EIA studies, and guidelines on preparation of EIA reports.

2.2 Site Suitability Assessment

Before an industrial project is planned, prior consideration are taken in ensuring the proposed site location is suitable for its purpose, and any environmental concerns must be addressed by design and/or planning. Avoidance of conflict(s) through proper siting, and more importantly, with consideration of environmental controls and pollution prevention, is important for long-term sustainability of any industrial activity. This would help to reduce unnecessary investment costs that may be required, especially with regards to pollution control, and to improve public perception of the project or activity.

The Guidelines for the Siting and Zoning of Industries and Residential Areas (SZIRA) 2012 and the Environmental Essentials for the Siting of Industries in Malaysia (EESIM) 2017, published by DOE, serves as a guidance documents for project developers when selecting a suitable site for the setting up of a manufacturing or industrial facility. Proposed industrial activity shall be sited within an industrial estate, and developed and managed with environmentally sound control measures. In considering the suitability of the proposed site, the site of interest is evaluated in terms of its compatibility with respect to the gazetted Structure and Local plans, surrounding land use, provision of set backs or buffer zones set by PLANMalaysia (Jabatan Perancangan Bandar dan Desa), the capacity of the area to receive additional pollution load, and waste disposal requirements.