

Environmental Guideline on Traffic Centre



Department of Environment

This environmental guideline provides guidance to ensure that all environmental issues are duly taken into consideration by the prospective developers.



1.0 Background

A traffic centre is a designated terminal where a bus, taxi or railway starts or ends its scheduled route. Many traffic centres provide ancillary services such as offices (for security personnel, conductors, operator who sets the timetable/schedule), waiting sheds, ticket sales as well as facilities such as toilets, shops and markets.

The construction and operation of a traffic centre is associated with several environmental issues, namely:-

- Site selection
- Noise
- Dust and exhaust emissions
- Solid wastes
- Wastewater
- Poor housekeeping

2.0 Objectives of the guideline

This guideline is meant to ensure that prospective developers:-

- adopt appropriate mitigating measures to safeguard the environment.
- comply with provisions of relevant laws/ regulations/standards.
- adopt eco-friendly practices to optimize use of resources.

3.0 Applicable Legislation

The construction and operation of a traffic centre does not warrant a Preliminary Environmental Report (PER) Approval or an Environment Impact Assessment (EIA) Licence.

4.0 Location and Siting

The selection of the site for a traffic centre should be determined on the basis of the number of vehicles to be accommodated, the existing development context of the site, the traffic to be generated as well as services and facilities proposed.

- (i) The location and siting of a traffic centre should be to the satisfaction of the Traffic Management Road and Safety Unit, Road Development Authority, National Transport Authority and the Local Authority concerned.
- (ii) The existing development context of the site should be compatible with the activity.
- (iii) At the design stage of new traffic centres, consideration should be given to the site lay-out, with a view to avoiding disturbances to the surrounding environment. In particular, attention should be paid to the location of entrances, exits, access roads and amenities.

Note:-

- Existing and proposed access roads should be designed to adequately serve the traffic generated such that the environment and amenity of the area is not compromised through traffic.
 - The site should be large enough to allow for the vehicles to reverse within the premises and park in a nose-out position.
- (iv) The site should not be located within any Environmentally Sensitive Area (ESA) and its prescribed buffer zone as per ESA Study 2009 such as wetland, steep slope and in areas that are likely to be affected by hazards such as inland flooding, landslide and storm surges, amongst others.

(v) On site wastewater disposal facility such as septic tanks and absorption pits/leaching fields shall be located not less than 30 m from any water course as per Rivers and Canals Act 1863.

(vi) Existing natural drains and watercourses on or in the vicinity of the site shall not be tampered with.

5.0 Mitigation of Environmental Impacts

5.1 Noise abatement

Noise from traffic centres arises from:-

- Engine noise (vehicular movement and idling of engine)
- Services, facilities and activities within site

Mitigating measures include:-

- Engines of vehicles to be switched off when stationary
- Appropriate management measures to prevent noise nuisance to the surrounding environment.

5.2 Dust and exhaust nuisances

The movement of the vehicles within the compound generates dust and exhaust emissions which require necessary abatement measures.

The exhaust emissions from the vehicles should be within permissible limits as per the Road Traffic (Control of Vehicular Emissions) Regulations 2002 enforced by the National Transport Authority.

Mitigating measures include:-

- Engines of vehicles to be switched off when stationary to prevent smoke as well as unnecessary fuel consumption.
- Proper maintenance of bus engines by respective transport companies or owners.
- The premises should be tarred to abate nuisance from dust.

5.3 Wastewater management

Wastewater is generated by staff and people on site.

Mitigating measures include:-

- Provision of appropriate domestic wastewater treatment and disposal facility to the satisfaction of the Wastewater Management Authority.
- Installation of grease traps or oil water separators for removal of floatable solids from water.

Note:- Maintenance of the grease trap or oil water separator is to be carried out by the owner / promoter.

5.4 Solid waste management

The main sources of solid wastes are domestic wastes, including plastic bottles, food packaging, beverage cans/ bottles.

Mitigating measures include:-

- Domestic solid wastes to be regularly collected in bins or waste handling receptacles and disposed of to the satisfaction of the Local Authority.
- No waste of any type to be disposed of in any watercourse including drains, canals and the surrounding environment.

5.5 Poor housekeeping

Poor housekeeping may attract pests, rodents, stray dogs and cause sanitary nuisances.

Mitigating measures include:-

- The premises should be kept clean at all times with good housekeeping.
- Installation of bait stations/ traps to control pests and rodents.

5.6 Other mitigating measures

Mitigating measures include:-

- Necessary precautions should be taken to avoid disturbance to the neighbourhood by way of odour, dust, mud, noise or traffic during construction and operation phase.
- Provision for a proper drainage scheme for evacuation of stormwater to avoid any risks of flooding/water-logging of site and adjoining areas to the satisfaction of the Local Authority.
- Access for Disabled Persons - The improvement of access and provision of facilities to ease the passage of mobility impaired people should be considered as an integral part of the design.

5.7 Eco-friendly Measures and Sustainability

Best environment friendly practices and initiatives need to be adopted during the construction and operation of a traffic centre, such as water and energy conservation measures (rain water harvesting for washing of premises, LED technologies, sensor lights). *Solar lighting and rain water harvesting are highly recommended for traffic centres. Segregation Bins for collection of recyclable wastes could also be placed in large traffic centres. Adequate green spaces / areas should be allocated.*

Note:

- a. Relevant organizations need be consulted with regard to health and safety, traffic implications, fire, amongst others prior to embarking on the project to ensure compliance with their respective laws/regulations/standards.
- b. Non-compliance with environmental laws namely standards for air and noise is an offence under the EPA.

Copies of this guideline are available at the Department of Environment and on the website of the Ministry at <http://environment.govmu.org>; the government's portal at <http://www.govmu.org>, including the websites of Local Authorities.