DESIGN GUIDANCE

LOCATION AND SITING OF PETROL FILLING STATIONS

This document is issued as

PPG 8: Design Guidance on Location and Siting of Petrol Filling Stations

Application of the Guidance

This Planning Policy Guidance is prepared to help the oil companies in the site selection and design of the petrol filling and service stations and for the local authorities to determine development applications.

Planning Policy Guidance is prepared and issued to Local Authorities under Section 13 of the Planning and Development Act 2004.

Applicants should ensure that they have followed the design process and standards. The aim of the guidance is to provide a set of performance criteria which should be broadly followed as each site is different and the design solutions may be varied and unique. Nevertheless, developers should strive to comply as far as possible with the design principles enunciated in this document. It has to be used together with Planning Policy Guidance 1: Design Guidance - first issued in November 2004, revised in September 2006, regarding the Technical Sheets for Provision of Infrastructure.

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Effective Date

03 September 2012
1.0 INTRODUCTION

The rapid growth of vehicular traffic in the country and subsequent increase in the number of petrol filling stations along the motorways but also on other urban roads and within settlements urges for a real need to control and manage the future development of such activities. Moreover, there have been concerns as to the overprovision of petrol filling stations with multiple access and exit points leading to driver frustrations and creating traffic hazards.

1.1 APPLICATION

This PPG applies to all new petrol filling and service stations (PFS) providing fuelling facilities such as petrol, diesel, oil and liquefied petroleum gas (LPG). In addition to fuelling facilities, servicing, lubricating and cleansing are also undertaken in some Petrol Filling Stations. Moreover, some Petrol Filling Stations also provide small scale retail sale compatible with and related to the operation of the station.

1.2 OBJECTIVES OF THE PPG

- To encourage the siting of petrol filling stations in places where there is less impact on traffic and the environment.
- To set clear guidelines on the design of petrol filling stations and safety features to be compulsorily applied to each filling station.
- To ensure compatibility of filling stations with adjoining uses and the physical characteristics of the site where it is located.
- To achieve a high standard of vehicular accessibility and minimize impacts of filling stations on surrounding traffic networks.

1.3 SCOPE

This document is for the use of the local authorities, members of the public and oil companies seeking approval for the construction of a petrol filling station.
1.4  STATUS OF THE PLANNING POLICY GUIDANCE

Planning Policy Guidance is a National Planning Instrument under the Planning and Development Act 2004. Section 13 of this Act provides for the preparation of guidance on a wide range of land development. Planning Policy Guidance prevails over other planning instruments except the National Development Strategy. All Local Authorities to whom this guidance is issued should comply with it.

The operators should nevertheless also comply with all other relevant legislations namely the Local Government Act 2011, the Business Facilitation and (Miscellaneous Provisions) Act 2006, the Town and Country Planning Act 1954, the Building Act 1919 and the Inflammable Liquids and Substances Regulations 1953.

2.0  DESIGN GUIDANCE

2.1  Site Location

Functionally, petrol filling stations (PFS) should be located where they are readily accessible to vehicles to avoid motorists having to make unnecessary detour for the purpose of refuelling. Petrol Filling Stations in Mauritius may be classified into two categories: those catering for the needs of through traffic and those serving on a local basis such as residential, commercial and industrial areas. The first category of Petrol Filling Stations is mainly located along the motorway, link roads, bypasses and the second category is located along the main roads of most densely populated towns and villages.

On single carriageway classified A or B roads in rural areas carrying a low volume of traffic, if petrol filling stations are to be provided on either side of the road, they should not be located directly opposite each other, but should be not less than 100m apart, with the left hand station seen first. However, the proposed staggered length must be more than 150m for classified roads found both in rural and urban areas carrying a higher volume of traffic. Where stations are located on the same side of the road, they should be spaced at least 300m apart.
unless they are contiguous with a common entrance and exit. On dual carriageway roads, stations may be sited opposite to one another provided the dual carriageway is divided by a central reservation.

2.2 Planning Criteria for Site Selection

Petrol filling stations should be located at a minimum of 50m from any public institution such as schools, churches, public libraries, auditoriums, hospitals, public playgrounds, etc. and any environmentally sensitive areas such as wetland. Area of land to be developed should be sufficient to allow maneuvering of vehicles within its curtilage but should not be less than 844 m² (20p). The site should permit construction of wide entrance and exit with easy access to ensure free flow of vehicles in and out of the PFS. It is desirable to have the longest possible frontage, the minimum being 30m with minimum entry and exit widths of 7m.

Petrol Filling Stations should not be sited within 100m of any roads bends, roads junctions or vertical curve on classified A & B roads. In other words, a minimum sight distance of 100m should be provided on the approaches to filling stations entrances and exits along classified A and B roads. For roads lower in the hierarchy, namely, Urban and Rural roads, this minimum sight distance may be 50m.

Wherever possible, petrol filling stations should be erected on level rather than sloping sites to prevent rolling of discarded materials such as cans, drums, etc. When sited in shopping centres, filling stations should be located in an isolated area of the development as long as planning criteria are met, for example, set back.

On the whole, Petrol Filling Stations should be sited in such a way as to avoid unnecessary back tracking (reversing). The function of the road, the volume and speed of traffic on the particular stretch of road, visibility and other relevant factors should be taken into consideration in selecting Filling Station sites. Normally, siting of PFS along classified A&B roads at cross-junctions, T-junctions, Y-junctions, staggered and skewed junction, scissors
junction, multi-leg junction and rotary intersection should as far as possible be avoided. However, any application for a PFS at the different junctions should be assessed on its own merit using sound traffic engineering parameters.

Moreover, the interaction between motor vehicles and pedestrians at the driveway/footpath interface also require careful consideration, especially in the built up areas.

If two or more fuel stations are to be sited in close proximity for some reasons, these would be grouped together to have a common access and if the fuel stations are to be along a motorway, the access must be through a service road of 7.0m width and connected to the motorway through acceleration/deceleration lanes as per the standard and approved by the RDA.

### 2.3 Noise

The siting of petrol filling stations should take into account the potential noise impact on the adjacent sensitive users due to the operation of the filling stations and vehicle movements in and out of the filling stations, particularly during night hours. In this respect, the locations of the ingress/egress need to be carefully considered to avoid noise disturbances.

All noise generating facilities of the filling stations should be so arranged to minimise direct noise impact. Any noise impact should be mitigated with appropriate measures to satisfy the noise standards as per the Environment Protection (Environmental Standards for Noise) Regulations 1997.

### 2.4 Plot size

The minimum size (min. 844m²) and shape of the plot for the petrol filling station would need to be such that it suitably accommodates fuel pumps, offices, stores, compressor room, air pump and kiosks without causing any hindrance to the movement of vehicles of expected maximum dimensions, within filling stations and in the access area.
The air pumps and kiosks for pollution control measurements (if any) should be installed at some distance from the fuel pumps so that the vehicle requiring these services do not cause hindrance to the free movement of vehicles entering or exiting for refueling.

The recommended site dimensions of new filling stations are as follows:

<table>
<thead>
<tr>
<th>Type of PFS</th>
<th>Minimum Size (m²)</th>
<th>Minimum Frontage (m)</th>
<th>Minimum Depth (m)</th>
<th>Minimum Width of Access Road (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) PFS without LPG facilities</td>
<td>844</td>
<td>30</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>(b) PFS with LPG facilities</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.5 Setbacks

2.5.1 Indicative Setbacks to plot boundaries

<table>
<thead>
<tr>
<th>Setback</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump Island</td>
<td>≥ 3m</td>
</tr>
<tr>
<td>Dispensers</td>
<td>≥ 6m</td>
</tr>
<tr>
<td>Main Building</td>
<td>≥ 2m</td>
</tr>
<tr>
<td>Washing area/platforms</td>
<td>≥ 3m</td>
</tr>
<tr>
<td>Underground Tanks</td>
<td>≥ 3m</td>
</tr>
</tbody>
</table>

2.5.2 Road side Setbacks

<table>
<thead>
<tr>
<th>Road</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A and B Road</td>
<td>6m</td>
</tr>
<tr>
<td>Coastal Road</td>
<td>6m</td>
</tr>
<tr>
<td>Access Road</td>
<td>4.5m</td>
</tr>
<tr>
<td>Motorway</td>
<td>20m</td>
</tr>
</tbody>
</table>

Facilities for car washing, petrol filling and lubrication bays should be covered as far as possible. Such covering structure should not affect air circulation of the filling stations. The wash stations should be properly shielded to prevent the projection of water beyond the site boundary. No servicing and repairs of vehicles shall be undertaken within the premises of the petrol filling station.
2.6 Access and parking

Access to PFS along the Motorway should be through well designed acceleration and deceleration lanes of minimum width of 3.5m and length of 150m including taper. Adequate vehicles spaces should be provided within the station to avoid vehicles queuing along the public road. Appropriate traffic signs and road markings should be provided to guide roads users to and from the PFS.

In all cases, Petrol Filling Stations shall be designed for one-way operation to avoid vehicles having to reverse and to discourage vehicles taking short-cuts by entering via the egress point and leaving via the ingress point.

The owner shall maintain in good condition the deceleration/acceleration lanes, service roads (free from any potholes/patches), drainage arrangement (clean conditions to allow full discharge of storm water), signs and marking (existing at identified locations with clear required visibility).

However, where there are two or more road frontages and the Petrol Filling Stations is sandwiched between two roads, an additional entrance or exit may be permitted if it would improve internal circulation and would neither disrupt traffic circulation on the roads fronting the site nor adversely affect evacuation of vehicles in emergency.

The provision of adequate visibility at PFS driveways is fundamental to safe design. The vertical and horizontal sightlines at the exit points must be kept free from visual obstructions such as advertising panels, signage, etc. .

Structures within PFS sites such as fences and walls should be erected at a height so that they do not affect forward visibility of vehicles to enter and exit the PFS. Generally, fences or boundary walls should be 0.9-1.0m high.
2.7 Waiting Spaces

Provision should be made for adequate spaces within the station to avoid vehicles queuing along the public road. Within the site, one vehicle space should be provided adjacent to each metered filling point. Additionally, a minimum of three waiting spaces should be provided for each filling point to hold vehicles waiting refueling.

Where general lubrication and other servicing facilities are also provided, four additional spaces should be provided for each service bay. Those spaces should not obstruct the refueling vehicles.

Consideration shall also be given to provide an additional space between each air-pumping point.

2.8 Drainage

The surface water from the site shall be collected through a proper reticulation network and reused for the general cleaning of site and washing of vehicles. Any excess water shall be channel through a grease trap and a hydro-carbon separator prior to discharge in an absorption pit.

The drainage arrangement should be to the satisfaction of the Road Development Authority and the Local Authority.

2.9 System for Signs and Markings

Appropriate signs and markings have to be provided at the location of fuel stations for the guidance of road users. Informatory sign for fuel station would need to be provided at 1km ahead, 500m ahead and at the entry point. Signage must be located in suitable locations where it does not restrict drivers view.
2.10 Use of remaining site

The use of any surplus land on the premises for any permitted uses shall be subject to such conditions as the Local Authority may consider necessary in order to obviate conflict between vehicles using the filling station and pedestrians or other vehicles using the remainder of the site.

2.11 Visual consideration

The design of petrol filling stations should not degrade the visual character and the quality of the locality. Landscaping should be incorporated into the design of Petrol Filling Stations as far as possible and a buffer strip of at least 12 metres long and 3 metres wide should be provided along the outer edge of all roads.

Landscape treatment such as amenity stripes, boundary walls, buffer distance from adjacent developments, the design of the signposts, canopies, etc. can help to improve the appearance of filling stations. Landscaping should be incorporated into the design of PFS as far as possible.

2.12 Convenience Store

A convenience store of a maximum size of 60m² may be permitted on site for a filling station for the sale of related goods such as engine oil, lubricants, car care products, etc and pack foods and soft beverages. No cooking of foods items shall be undertaken on site.
3.0 Compliance with Environmental conditions

The following environmental conditions as spelt out in the Environment Guidelines No.8: Filling Station must be strictly adhered to:

(i) All electric motors such as pumps and compressors shall be housed in soundproof enclosures to keep noise level within permissible limits as per the Environment Protection (Environmental Standards for Noise) Regulations 1997. The noise exposure limits as per the above regulation are as follows:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Industrial noise</th>
<th>Neighbourhood noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 – 21:00</td>
<td>60 dB(A) Leq</td>
<td>7:00 – 18:00</td>
</tr>
<tr>
<td>21:00 – 7:00</td>
<td>55 dB(A) Leq</td>
<td>18:00- 21:00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21:00 – 7:00</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td>50 dB(A) Leq</td>
</tr>
</tbody>
</table>

A tonal character adjustment of +5 dB(A) should be applied to the measured value where the noise has a definite continuous note such as a whine or hiss.

(ii) All service areas shall be paved / asphalted to avoid dust nuisance

(iii) A contingency plan as provided for under section 30 (3)(a) of the Environment Protection Act 2002 shall be prepared and implemented to combat any case of accidental spillage of fuel.

(iv) All petroleum products and used oil must have secondary containment. Areas enclosed by secondary containment shall be maintained, and all accumulated water within secondary containment areas should be disposed of. The secondary containment shall have a storage capacity of 110 % of the capacity of the storage tank.
(v) All hazardous wastes shall be collected and disposed of as per the Environment Protection (Standards for Hazardous Wastes) Regulations 2001.

(vi) Used oil shall be collected and disposed of as per the Environment Protection (Collection, Storage, Treatment, Use and Disposal of Used Oil) Regulations 2005.

(vii) Solid waste shall be collected and disposed of.

(viii) Wastewaters shall be collected, treated and disposed of.

(ix) No nuisance by way of noise dust, odour shall be caused to the public and surrounding environment during site preparation, infrastructural works and during operation of the activity.

(x) The Department of Environment of the Ministry of Environment and Sustainable Development shall be informed in writing of the dates of commencement of works on site and operation of the activity for monitoring purposes.

4.0 Security and Safety

4.1 Certificate from Fire Services

Filling Stations are to be equipped with fire-fighting and fire protection equipment installed in accordance with the requirements of the Fire Service Department. Moreover, certificate from the Fire Service Department needs to be obtained prior to application for BLUP.

4.2 Storage of Fuel

Unloading and storage of fuel and any other inflammable liquids or substance should be in accordance with the Regulations 1953 (GN 179/53) made under the Inflammable Liquids and Substances Act.
5.0 Submission to the Local Authority

The project proponent should provide a complete set of architectural and engineering plans of the proposed development to the Local Authority for a Building and Land Use Permit.

The local authority shall be bound to carry formal consultation with the public by requesting the service provider to carry out:

- Site notification of the proposed development in line with current practice

- For installation of any engine, notification under the Building Act should be followed. (i) Legal notice should be served on all contiguous owners 15 days prior to submission of application for BLP; (ii) Press notice with publication in two dailies on two successive days.

The public will have 15 days from the date of last publication to make representations to the permit authority.

In deciding to grant permit for a filling station, the permit authority should ensure that:

(i) The policies set out in this Planning Policy Guidance are complied with;

(ii) Clearances from any relevant authority including the Fire Services Department, Road Development Authority and the Traffic Management and Road Safety Unit are obtained.

(iii) In assessing planning applications for filling stations, all relevant factors including land use compatibility, topography of site, site conditions, traffic, environmental and fire safety would be taken into consideration and each case would be assessed on its individual merits. Should the application be considered acceptable, approval conditions may be imposed to ensure that the proposed facility could meet the various requirements.
6.0 Licence from the National Transport Authority

As per Section 166A of the Road Traffic Act 1962, a licence must be obtained from the National Transport Authority prior to operating a petrol service station. The following documents need to be produced while applying for a licence from the NTA:

(1) Certificate from the Fire Services Department
(2) Receipt of trade fee from the Local Authority
(3) Clearance from the Road Development Authority
(4) Clearance from the Traffic Management and Road Safety Unit
(5) Clearance from the Ministry of Environment & Sustainable Development.

7.0 Right of Appeal

Right of appeal for refusal/approval of an application for a filling station is provided under the Town and Country Planning Act 1954.

8.0 Effective Date

The Planning Policy Guidance on Location and Siting on Filling Stations is effective as from the 3rd September 2012.