Design Sheet Wastewater Treatment Plant

Ministry of Housing and Lands

Contents:

1.0 Introduction

2.0 Background

3.0 Design Sheet
   3.1 Siting of Wastewater Treatment Plant
   3.2 Topography
   3.3 Accessibility
   3.4 Visual Appearance
   3.5 Noise
   3.6 Plot space requirements for the setting up of a Wastewater Treatment Plant

4.0 Effective Date

List of Table:-

Table 1  Indicative Setbacks for Wastewater Treatment Plant
Wastewater Treatment Plant

1.0 Introduction

In line with government’s initiatives to protect our environment and to ensure the long-term sustainability of our tourism industry, Government has decided that every hotel premises must include a wastewater treatment plant. Many hotels, mainly those which have 50+ rooms already have a treatment plant.

This Design Sheet makes it compulsory for all proposed hotels of a minimum of 50 rooms, including boutique hotels and Integrated Resort Scheme (IRS) projects, irrespective of their locations, to include a wastewater treatment plant in their project provided they are not connected to the main sewer network.

Real Estate Scheme (RES) Projects of a minimum of 50 rooms located within the Coastal Zone, that is within one km from the High Water mark (HWM) as defined in the Environment Protection Act (EPA) 2002, to also provide a wastewater treatment plant, where they are not connected to the main sewer.

Real Estate Scheme (RES) Projects of a minimum of 50 rooms located outside the one km range from the High Water mark to provide a wastewater disposal system to the satisfaction of the Wastewater Management Authority.

2.0 Background

On account of the projected increase in tourist arrivals in the next few years, it is anticipated that a number of additional hotels will be constructed in the coastal zones. As a matter of fact, there will be a greater need to protect and manage our coastal zone, including our lagoons. Thus, a high standard of environmental protection will have to be provided so as to ensure conservation of ecological and recreational assets of the coastal areas.

On the other hand environmental awareness is growing throughout the world and more and more tourists are attracted to destinations that take care of their environment. One of the ways to make Mauritius a Green Destination is to start with the conservation and protection of the environment within the hotel premises.
3.0 Design Sheet

The Design Sheet provides for the specific planning criteria or typical design requirements that must be complied with by the proponent. In determining applications for wastewater treatment plants, the permit authority should have regard to the following criteria:

3.1 Siting of Wastewater Treatment Plant

As far as possible, wastewater treatment plants shall be located downwind of all residential premises. Conventional wastewater treatment plant of significant nature with open basins (not enclosed) should not be located less than 50 metres from the residential area. For wastewater treatment plant such as RBC, SBR and modern package types which are fully enclosed and equipped with odour control equipment, the location of the wastewater treatment plant should not be less than 15 metres from the boundary line of the hotel premises. Notwithstanding same, the location and design of wastewater treatment plant should be to the satisfaction of the Ministry of Environment and Sustainable Development, the Ministry of Health and Quality of Life, the Water Resources Unit and the Wastewater Management Authority.

A thick green belt must be provided between the treatment plant and the residential premises.

Treatment plants must not be located in ecologically significant features such as rare flora and fauna, endangered species, streams, wetlands or any other defined Environmentally Sensitive Areas (ESAs).
### Table 1: Indicative Setbacks for Wastewater Treatment Plant

<table>
<thead>
<tr>
<th>Features</th>
<th>Acceptable Distance in Metres (M) for Wastewater Treatment Plant</th>
<th>Other Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Water Mark Line</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Wetlands</td>
<td>30</td>
<td>Consultation be carried out with Wastewater Management Authority.</td>
</tr>
<tr>
<td>River, Lakes, Natural Water</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Boreholes (public) / (private)</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Residential Areas</td>
<td>50 (setback may vary with plant)</td>
<td>To be agreed with relevant authorities at EIA Stage.</td>
</tr>
<tr>
<td>Plot Boundary</td>
<td>15</td>
<td>To be agreed with relevant authorities at EIA Stage.</td>
</tr>
<tr>
<td>Pumping Station</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

### 3.2 Topography

It is preferable that the topography of the site be used to facilitate flow through the network without pumping. Some of the components of the plant may also be buried depending on the site characteristics.

### 3.3 Accessibility

It is preferable that the treatment plant be readily accessible through a dedicated service road so that its related activities do not interfere with other traffic within the hotel.

### 3.4 Visual Appearance

Visual impacts of the wastewater treatment plant need to be minimised with appropriate vegetation and landscaping features.
3.5 Noise

In case the applicant has to install an electric motor on site, he must obtain the relevant permit / clearance from the Local Authority. Moreover, the noise level generated by the electric motor must be within the prescribed noise level as per the Environment Protection (Environment Standards for Noise) Regulations 1997 promulgated under the Environment Protection Act.

3.6 Plot space requirements for the setting up of a Wastewater Treatment Plant.

In view of the many type of treatment technologies and each one having its respective requirements in terms of surface area, the plot space requirements for setting up a wastewater treatment plant would vary.

4.0 Effective Date

This amended Design Sheet on Wastewater Treatment Plant is effective as from the 08 October 2014.