

**REVISED VERSION**

**A PROPONENT'S GUIDE  
TO  
PRELIMINARY ENVIRONMENTAL REPORT  
(PER)**

**Department of Environment**

**Ministry of Environment and National Development Unit**

**October 2009**

**This is not a legal document. It serves as a general guideline. Sectoral  
guidelines are available at the Department of Environment**

# TABLE OF CONTENTS

|  |    |
|--|----|
| 1.0 Introduction   | 3  |
| 2.0 Objective  | 3  |
| 3.0 Guideline on the Contents of a PER   | 4  |
| 3.1 Title Page   | 4  |
| 3.2 Table of Contents  | 5  |
| 3.3 An Executive or Non Technical Summary                                      | 5  |
| 3.4 Introduction   | 5  |
| 3.5 Site and Project Description   | 5  |
| 3.5.1 Site Description   | 5  |
| 3.5.2 Project Description  | 6  |
| 3.6 Method of Assessment Including Baseline Data                               | 7  |
| 3.7 Assessment and Mitigation of Direct and Indirect Environmental Impacts     | 7  |
| 3.8 Socio Economic and Socio Cultural Impacts                                  | 8  |
| 3.9 Residual Impacts   | 9  |
| 3.10 Cumulative and Synergistic Effects  | 9  |
| 3.11 Checklist for Monitoring Purposes   | 9  |
| 3.12 Enhancement Opportunities such as Landscaping and Embellishment           | 9  |
| 3.13 Identification of any Additional Studies                                  | 10 |
| 3.14 Consultation  | 10 |
| 3.15 Any Alternative   | 10 |
| 3.16 Conclusions and Summary of Environmental Outcomes                         | 10 |
| 3.17 Supporting Documentation & References                                     | 10 |
| 3.18 Appendices  | 10 |
| 4.0 Appendices   | 11 |
| Appendix 1: List of undertaking requiring a PER                                | 12 |
| Appendix 2: Requirements for a PER according to EPA 2002<br>as amended in 2008 | 13 |

## **INTRODUCTION**

A Preliminary Environmental Report (PER) is a short form of an Environmental Impact Assessment (EIA), and is generally meant for assessing projects with lesser environmental impacts. This preliminary analysis is undertaken to identify the impacts associated with the proposed development and the means of mitigation. PER is an important tool for sound decision making and for achieving sustainable development.

The PER mechanism was introduced in the Environment Protection Act (EPA) 2002. With the coming into force of the Business Facilitation (Miscellaneous Provisions) Act 2006, undertakings which are less polluting have been waived from the lengthy administrative procedures for processing of applications. In the same context, Part A of the First Schedule of the Environment Protection Act (EPA) 2002 which pertains to the list of undertakings requiring a PER has been reviewed to exclude certain undertakings from it.

Consequently, the First Schedule to the EPA 2002 has been repealed and replaced by the Environment Protection (Amendment of Schedule) Regulations 2006. The list of undertakings warranting the approval of a PER is at Appendix 1. EPA 2002 also empowers the Minister to request a PER for any non-listed activity, which, by reason of its nature, scope, scale and sensitive location could have an impact on the environment.

The processing of a PER application involves consultation with several Ministries/Authorities. Thus, a proponent applying for a PER approval shall submit **10 copies** of the PER and such additional copies as the Director may request. Requirements for a PER as per EPA 2002 as amended in 2008 are at Appendix 2.

## **2.0 OBJECTIVE**

The objective of this guideline is to assist proponents and consultants in the preparation of a comprehensive PER on a project to enable a timely processing of the application.

This guideline provides general guidance for the preparation of a PER. This guideline should be complemented by sectoral guidelines (available on this ministry's website) and other relevant guidelines such as the Planning Policy Guidance, National Development Strategy, Outline Schemes and relevant Acts and Regulations.

### **3.0 GUIDELINE ON THE CONTENTS OF A PER**

The proponent or the consultant preparing a PER should ensure that all the environmental and socio-economic parameters are addressed and their impacts are identified and taken into account in the project design. The PER should not comprise statements of a general nature but instead should provide substantive and indicative information on the proposed measures to mitigate all adverse environmental impacts as well as on the opportunities for environmental enhancement so as to enable a proper assessment.

Prior to embarking on a project, a proponent should ensure that the proposed development is compatible with the zoning of the site and that relevant clearances such as zoning certificate, land conversion permit or lease agreement (if applicable) have been obtained. In case of inappropriate zoning and the absence of proof of land ownership or authorisation, the PER application will not be considered.

A PER should be in conformity with such policy or environmental guidance as may be published in respect of an undertaking and should be duly signed and dated by either the proponent of the undertaking or his legal representative and countersigned by the consultant.

The preparation of a PER includes the following studies:

- Collection of baseline data and information;
- Identification of impacts in terms of magnitude and significance;
- Mitigating measures for each impact identified;
- Analysis of alternatives of the project;
- Development of a monitoring programme and environment management plan

The above studies should be documented in the form of a PER. The format below provides a guide for the preparation of a PER:-

#### **3.1 Title page**

This should contain details of:

- ◆ The full title under which the PER has been prepared;
- ◆ Location of project;
- ◆ Name of the project initiator/proponent, signature and contact details (address, phone and fax numbers);

- ◆ The team responsible for the preparation of the PER or name(s) of the consultant(s)/ consultancy firm and contact details (address, phone and fax numbers)

### **3.2 Table of Contents**

The table of contents should indicate the different chapters with their respective page numbers.

### **3.3 An Executive or non technical summary**

The summary should be concise and give a short overview of the proposal. The language used should be simple and non technical. It should focus primarily on key impacts identified in the PER and measures taken to avoid and /or reduce them.

### **3.4 Introduction**

It should provide background information on the project, the promoters, objective and justification of project, any experience in similar projects, project costs, benefits, employment opportunities, as well as the technical, economic and environmental features essential to the project.

### **3.5 Site and Project Description**

This section should describe the site and the project and should indicate the justification and rationale underlying the project.

#### **3.5.1 Site Description**

The site description should include:-

- Project location and land extent. The project location shall be indicated on a map drawn to a scale of 1:25,000;
- Ownership of land and proof thereof, or lease agreement clearly indicating the owner's consent to the project;
- Present zoning of the site as per approved and recent Outline Scheme (can be obtained from the Town & Country Planning Board or the Local Authorities);
- Plans and policies with which the project conforms;
- Site characteristics in terms of site location, landform, magnitude of slope of site (supplemented by 0.5m interval contour map), geology, soil type, topography, water table level, prevailing wind direction, type of flora and fauna, presence of any rare or

endangered species, sensitive habitats of ecological importance, present and past land use (if known), accessibility to site, etc;

- Certified and comprehensive site/location plan drawn to scale and duly certified by a Sworn Land Surveyor with known landmarks as reference points and showing any environmentally sensitive areas, water bodies, wetlands, boreholes and any existing development in the vicinity (within a 500m radius);
- Description of the surrounding environment indicating adjacent land uses, residential areas/built-up environment, environmentally sensitive areas, watercourses (canals, rivers, streams, natural drain), designated sites of interest, and other attributes of the area e.g. amenities, recreational and agricultural values;
- Indication of other similar projects in the surroundings;
- Existing infrastructure and availability of statutory services (water, electricity, sewerage system and telephone lines);
- The future development projects under the outline scheme should also be located in the site plan of the proposed development, as far as practicable;
- The site topography with contour lines at 0.5 m intervals should be submitted by the proponent;
- The proponent should send comprehensive and certified site plans for an easy location;

### 3.5.2 Project Description

The project description should include:

- Type of project and associated activities to be carried out;
- The design, size and scale of the project;
- Detailed site/layout plan drawn to scale of 1:500 (**as applicable**) indicating site boundaries (as per title deeds), all existing development on site (if any) and all proposed structures to be put up on site with setbacks from site boundaries; the layout plan of scale (1:500 or better) shall indicate the relevant set back of 30m from all natural water courses (canals, rivers, streams) and show compliance of the proposed development as per Rivers and Canals Act.
- Detailed plans indicating elevations, plot coverage and gross floor area.

- Description of project in terms of raw materials, products, process technologies, equipment, machinery (Horse Power and noise level), work force, type of fuel used, hours of operation, marketing of products, etc;
- Layout plans of the proposed or existing building, architectural plans, photographs and aerial photographs whenever necessary (aerial photographs are available at the Ministry of Housing and Lands);
- Plans submitted should meet the design criteria-spelt out in the Planning Policy Guidance.
- Architectural drawing of building and site plan;
- Safety data sheets for chemicals;
- Information as per Fire Prevention Form II
- Flow chart of the process production and explanation on the process;
- Project life cycle;
- Proposed schedule for implementation;
- Zero development option;

### 3.6 Method of Assessment Including Baseline Data

- Baseline information on which the PER was based upon;
- Data source, data collection methodology (e.g. survey, matrix or checklist) and results of site investigation;
- Any constraints in collection of data or omissions in data collected and proposed remedial measures;
- A geotechnical report including description of subsurface strata up to 3m deep, maximum level of water table and results of percolation test as per BS 6297 **as applicable**. The geotechnical report shall be certified by a Civil Engineer registered with the Council of Registered Professional Engineers (Mauritius) or a Soil Scientist. (Note: The onus of requesting a geotechnical report/percolation test rests with the Wastewater Management Authority who might request same on a case-to-case basis depending on the sensitivity of the site. Proponents/Consultants are advised to consult the Wastewater Management Authority in order to ascertain as to whether a geotechnical report is required for a particular project);
- Baseline data on prevailing climatic conditions (**as applicable**), namely rainfall, temperature, relative humidity, wind direction and speed, ambient air quality, water

### **3.7 Assessment and Mitigation of Direct and Indirect Environmental Impacts**

This section should describe all the direct and indirect environmental impacts during the construction, operation and decommissioning (if any) phases of the project. For each impact, the PER should state the steps to be taken to avoid/reduce and or eliminate the impacts, and the likely effectiveness and adequacy of the mitigation measures proposed.

The impacts and mitigating measures should be included in terms of solid waste, wastewater, noise, odour, air emissions, traffic, *etc.* Some examples are as follows:

- Impacts on the physical environment associated with the implementation of the proposed development such as site preparation, construction impacts such as noise, dust nuisances, traffic implication and mitigating measures against these impacts;
- Source, type and amount of solid wastes generated on a daily/monthly basis, mode of collection, storage and disposal of solid waste;
- Source, type and expected volume of wastewater generated on a daily basis, the maximum number of workers to be employed on site, physical, chemical and biological characteristics of wastewater, method of collection, treatment and disposal, the receiving media and its corresponding effluent discharge limitations as per existing legislations, design calculations, drawings and dimensions of wastewater disposal system, layout plan showing wastewater collection, treatment and disposal system;
- Amount of dangerous/toxic materials used, storage methods, threshold levels of dangerous/toxic material stored/handled on site together with identification system and a register of hazardous installation, details of processes and authorized limits for storage, contingency plan in case of accidental spill, fire hazards and natural disasters;
- Source of noise nuisance, level of noise during operation stage and precautionary mitigating measures;
- Source of odour and precautionary measures;
- Source, type, concentrations of air pollutants emitted and mitigating measures to be taken to reduce the concentration;



- Amount of traffic likely to be generated by development, particularly for the capacity of the road system in the locality, any implications on existing traffic flow, availability of parking facilities and loading/unloading facilities on site;
- The promoter should consider adequate engineering details concerning road junctions to main roads and views of the TMRSU should be sought regarding road safety and traffic impact.
- Precautionary measures against risk of soil erosion, detailed design, specification and layout of surface drains for storm water disposal indicating final evacuation;

### **3.8 Socio Economic and Socio Cultural Impacts**

This section should include:

- Impacts on adjacent residential areas, local community, surrounding amenities; and current activities carried out by different stakeholders including recreational activities;
- Impacts on cultural property such as sites, structures and remains of historic, religious, cultural, archaeological or aesthetic value.
- Note: where there is a reason to believe that the heritage resources will be affected by such development, the proponent/consultant shall carry out a Heritage Impact Assessment (HIA) and incorporate it in the PER document. The information to be provided in the HIA is as follows:
  - (i) The identification and mapping of all heritage resources in the area affected by the proposed development;
  - (ii) An assessment of the significance of such heritage resources;
  - (iii) An assessment of the impact of the development on such resources;
  - (iv) The results of consultation with interested and affected parties regarding the impact of the development on heritage resources;
  - (v) If heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
  - (vi) Plans for mitigation of any adverse effects during and after the completion of the proposed development;
- Safety measures for road users and pedestrians should be taken into consideration. These include footpath, road furniture and street lighting as well as access for disabled person.
- The PER document should also include the total cost of the project and the number of direct and indirect jobs expected to be created with the project.

### **3.9 Residual Impacts**

The PER should indicate all unavoidable impacts. These should be justified in terms of benefits of the project and enhancements.

### **3.10 Cumulative and Synergistic Effects**

The ability of the natural and social environment to assimilate cumulative stresses placed on them; the likelihood of negative synergistic effects; whether the proposed development has a significant impact on, or will be constrained by existing or future development rights in the area.

### **3.11 Checklist for environmental monitoring plan**

A checklist should be submitted indicating actions to be taken to ensure compliance with the mitigative measures proposed in the PER.

### **3.12 Decommissioning**

The PER document should also give any information on the decommissioning of the project.

### **3.13 Enhancement Opportunities such as Landscaping and Embellishment**

A brief outline should be given of any proposed enhancement work (landscaping and embellishment), its maintenance and upkeep. This should be distinguished from mitigation measures, which are integral to the project and form part of the proposed development; for example upgrading of an access road for the public. The proponent should indicate how the project is going to enhance the existing environment.

### **3.13 Identification of any Additional Studies**

Any additional studies necessary to implement the mitigating measures or to monitor effectiveness of proposed mitigating measures.

### **3.14 Consultation**

This section should indicate who has been contacted for the project. It should include:

- Consultation with the neighbours, and all other bodies who are likely to be affected by the proposed development (where the project is adjacent to a built-up area,

consultation with the local population is compulsory. In case of coastal projects, consultation with local fishermen, if any, is required to resolve conflicts).

- Any correspondence or application made to any other Authorities including the Land Conversion Unit of the Ministry of Agro-Industry, Food Production and Security, shall be included in the report.
- Consultation with relevant Ministries and Local Authorities

### **3.15 Any Alternative**

This section should give an outline of:

- The alternatives to the project
- The “Do Nothing” option – what will be the outcome of not undertaking the project?
- Can the project be undertaken elsewhere?

### **3.16 Conclusions and Summary of Environmental Outcomes**

- Include any irreversible residual impacts which cannot be mitigated.

### **3.17 Supporting Documentation & References**

### **3.18 Appendices**

These should include information, which would cluster the main body of the text, such as site photographs and maps, press releases, written responses to the project.

As appropriate can include any additional technical information, material safety data sheets, a list of reference materials, names, addresses and qualifications/expertise of the PER consultants, copies of clearances/ permits obtained or applied (if any) from authorities, title deed, proof of land ownership, etc.

## APPENDIX 1

### **List of undertakings requiring a Preliminary Environment Report as per Part A of the First Schedule to Environment Protection (Amendment of Schedule) Regulations 2006**

1. Construction of helipads
2. Coral crushing and processing
3. Creation of bathing areas by mechanical means
4. Depot for 50 buses or more
5. \* Discotheque or night-club
6. Food processing industry, excluding small and medium enterprises
7. Foundry, smelting plant or metallurgical work
8. Galvanising industry
9. Industrial-scale laundry and dry-cleaning within 1 kilometer of high water mark
10. Land reclamation and backfilling
11. Manufacture of animal feed
12. Manufacture of ceramics
13. Manufacture of paint, pigment and varnish
14. Manufacture of photographic films
15. Manufacture of plastics and plastic products
16. Manufacture of rubber products
17. Mechanical removal of marine flora such as sea grasses and marine algae

18. Parcelling out of land above 5 hectares for agricultural purposes, where the parcelling involves infrastructure work
19. Quarantine station for livestock
20. Ready-mix concrete plant
21. \*\* Rearing of livestock including cattle, goat, pig and sheep
22. Rearing of poultry above 5000 heads
23. Recycling plant
24. Rendering plant
25. Sawmill
26. Slaughter house
27. Textile industry associated with washing, bleaching and printing
28. Timber treatment plant

**\*As per a Cabinet Decision of 07/04/2006 no new licences for night clubs, except for hotels should be issued.**

**\*\*Applies for the rearing of more than 20 cattle heads, more than 50 goat heads and more than 50 sheep heads.**

**Livestock rearing on a smaller scale of up to 20 cattle heads, up to 50 goat heads and up to 50 sheep heads has to be carried through self adherence to the Environmental Guideline: livestock rearing including cattle, goat and sheep available on this Ministry's website.**

## **APPENDIX 2**

### **REQUIREMENTS FOR A PER ACCORDING TO EPA 2002 D AS AMENDED IN 2008**

Section 15(2)(a) of the EPA 2002 as amended in 2008 requires that “no proponent shall commence, or cause to be commenced:

- (a) a proposed new undertaking specified in Part A of the First Schedule, without an approval of a preliminary environmental report in accordance with section 16;
- (b) any undertaking more than 3 years after the issue of a PER approval unless the Minister, in circumstances beyond the control of the proponent, otherwise determines in respect of that undertaking.”

#### **Contents of a PER**

Section 16 of the EPA 2002 provides a general guide on a Preliminary Environmental Report (PER). According to section 16(1), a PER shall be-

- (a) in conformity with such policy or environmental guidance as may be published in respect of an undertaking and in such form as may be approved by the Director;
- (b) duly signed by the proponent of the undertaking or his duly appointed legal representative; and
- (c) deposited at the Director’s office in 10 copies or in such additional copies as the Director may request.

According to section 16(2), a preliminary environmental report shall contain a description of the undertaking with particulars of –

- (a) its location and its surroundings;
- (b) its process, design and size;
- (c) any data or information necessary to identify and assess the effects which the undertaking is likely to have on the environment, people and society;

- (d) the measures which the proponent proposes to take to avoid, reduce and, where possible, remedy any significant effect that the undertaking is likely to have on the environment; and
- (e) such other aspects of the undertaking as the Director may require.

According to section 16(3), a preliminary environmental report shall be accompanied by-

- (a) a site plan indicating the location of the undertaking;
- (b) a non-technical summary, where the report is prepared by a consultant;
- (c) a certificate issued by a notary expressing his opinion as to the ownership of the land on which the undertaking is to be executed, or where the proponent is not the owner of the land, by a written evidence of the permission of the owner, and a certificate issued by a notary expressing his opinion as to the owner's title.

Furthermore, the Director may request such additional information from the proponent as he thinks necessary.

### **Offences**

Any proponent who gives false or misleading information, or fails to disclose any material fact or information in a preliminary environmental report, shall commit an offence, and shall on a first conviction, be liable to a fine not exceeding 50,000 rupees and to imprisonment for a term not exceeding 2 years.

Any proponent who contravenes section 15(2) shall on a first conviction, be liable to a fine which shall be not less than 50,000 rupees and not more than 100,000 rupees and to imprisonment for a term not exceeding 4 years.

The Director of Environment may serve, or cause to be served, on any person who commences or carries on any development or activity without the relevant licence or permit issued under the EPA 2002 a **stop order** prohibiting the development or the activity.

**Copies of this guideline are available at the Environment Assessment Division, Department of Environment, 2<sup>nd</sup> Floor, Ken Lee Tower, 1 St Georges Street, Port Louis**

**Soft copies of this guideline can be downloaded from the website of this Ministry  
<http://environment.gov.mu>**

**For further information, please contact  
Environment Assessment Division  
Tel: 2036200 – 2036210  
Email: [menv@mail.gov.mu](mailto:menv@mail.gov.mu)**

**October 2009**