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APPLICATION FOR ENVIRONMENTAL CLEARANCE GUIDELINE FOR THE PREPARATION OF INDUSTRIAL PROJECT REPORTS

**National Environment Commission
Royal Government of Bhutan
August 2004**



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ROYAL GOVERNMENT OF BHUTAN
NATIONAL ENVIRONMENT COMMISSION SECRETARIAT

FOREWORD

In 1999, the National Environment Commission with technical and financial assistance from the Asian Development Bank (ADB) published six sectoral environmental assessment guidelines for the mining, roads, industries, hydropower, transmission lines and forestry sectors. Several stakeholder consultation workshops and seminars were conducted before the guidelines were published. These guidelines were intended to guide different project proponents through the process of acquiring an environmental clearance for their projects. The Environmental Assessment 2000 (EA Act 2000) was passed by the National Assembly in 2000 and the Regulations under the Act were adopted two years later. Stakeholder feedback and our experiences in implementing the EA Act and the guidelines indicated that there was a need to revise the guidelines in order to make them more practical and relevant to the Bhutanese context and also to streamline them with the provisions of the EA Act 2000. It was also felt that there was a need for two more sectoral guidelines for urban development and tourism as rapid developments in these two sectors was becoming a concern for Bhutan. Therefore, in 2003 the NEC once again revisited these guidelines and revised and updated them to make them more practical and functional documents. Several Environmental Codes of Best Practices (ECOPs) have also been produced to support these environmental assessment guidelines.

The NEC is grateful to the ADB for being so forthcoming with technical and financial assistance to revise and update these guidelines. The revision and updating of these guidelines were accomplished through close consultation with all the various stakeholders. We would also like to express our gratitude and appreciation to all the line ministries and stakeholders for their active participation, support and inputs. We are confident that the revised guidelines will be more useful documents that facilitate and expedite the environmental clearance process as project proponents will now have a better understanding of what information must be provided in order to attain an environmental clearance.

In Bhutan, environmental conservation has been embraced as one of the four pillars of Gross National Happiness - the other three pillars being good governance, socio-economic development and cultural preservation. However, with the expansion of developmental activities in the country, it is becoming very difficult to strike a sustainable balance between environmental conservation and socio-economic development. The number of industries is on the rise every year

while the demand for rural access to market facilities in the form of farm roads and feeder roads is increasing with every Five Year Plan - in the 9th Five Year Plan alone there is a plan to develop 588kms of farm roads. Environmental issues such as waste disposal related to urbanization are also becoming serious concerns for Bhutan. Bhutan is lauded by the international community for its sound environmental policies and the political will to implement these policies. However, environmental problems are becoming more and more visible and instruments like the EA Act 2000 must be implemented effectively to support the government's sound environmental policies and to ensure that Bhutan remains clean and green.

The environmental assessment process endeavors to mitigate and prevent the undesirable impacts of developmental activities. It is in no way intended to hamper socio-economic development in Bhutan but to guide project proponents in making the right investments in land, manpower, technology and mitigation measures to ensure that their projects have the least possible impacts on the environment. With the revision and updating of the old guidelines and the publication of two new guidelines on Urban Development and Tourism and relevant ECOPs, the NEC is hopeful that the private sector, line ministries and competent authorities under the Regulations for Environmental Clearance of Projects find the guidelines more useful, practical, informative and easy to comply with. It is the sincere wish and hope of NEC that all the stakeholders, both public and private will make the best use of these guidelines, which in turn will help in protecting our fragile ecology. Sound implementation of these guidelines will go a long way in minimizing the negative impacts of developmental activities on Bhutan's environment.



Nado Rinchen
Deputy Minister for Environment

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INTRODUCTION

The purpose of this guideline is to facilitate an objective analysis of the proposal by the promoter and present the information for environmental clearance and industrial license.

For centuries Bhutanese have preserved their natural resources and lived in harmony with nature. His Majesty King Jigme Singye Wangchuk has always emphasized that development must not take place at the expense of our natural resources. It is because of this political will and our traditional reverence for nature that Bhutan is today blessed with a rich, natural environment.

Aware of the problems that uncontrolled economic development can cause and recognizing the need for sustainable development, the Royal Government has chosen the “middle path” of sustainable development. This is a development philosophy that recognises the need to raise the living standards of the present population without compromising the country’s cultural integrity, historical heritage or the quality of life for future generations. A series of Environmental Assessment Guidelines have been developed to ensure that development is consistent with the “middle path” and developmental activities carried out in a sustainable fashion so as to maintain the rich biodiversity base of the Kingdom and to secure these benefits for succeeding generations.

The guideline has been developed to meet the requirements of the Ministry of Trade and Industry and NEC. It is, therefore, the responsibility of the project promoter to prepare a sufficiently detailed project report covering all aspects listed in the guideline to enable the relevant government agencies to assess and clear the project. Inaccurate and incomplete information will lead to delay/rejection of the project.

It is important that the project report for large and medium-scale industrial proposals also include a detailed financial analysis. Wherever certain data and figures are required, they should be presented in appropriate table formats in the respective chapters.

Two copies of the Project report should be formulated and submitted following the sequence of chapters outlined in the Guideline.

PROJECT REPORT

The Project Report should, at the minimum, cover the following broad Chapters to facilitate appraisal of the proposal.

1. INTRODUCTION: DESCRIPTION OF THE PROPOSED PROJECT

The Report should outline the following in the introduction:

- | The Project rationale / Purpose of the project
- | Mention the proposed project activity – what the project will manufacture/produce or the type of services it will provide (the final products or services)
- | Project's installed capacity

2. PROMOTER(S):

The Report should contain the following details about the promoter(s):

- | Full Name; Citizenship Card No; Age; Sex; Name of Father; Name of Mother; Marital Status; Name of Spouse; and Occupation of Spouse
- | Permanent Address: Village/Town; Geog; Dungkhag; Dzongkhag; House No. and Thram No.
- | Mailing or Contact Address (if different from the above), Post Office Box No, and telephone/facsimile no. and email address
- | Academic qualifications / experience
- | Promoter's current line of business (es) (if any)
- | Registered name and address of the current business

In case of company, the above information is required for all the major shareholders

3. DETAILS OF THE PROPOSED STRUCTURE AND OPERATION OF THE BUSINESS

The Report should provide the following details:

- | The proposed name of the company or business
- | The proposed legal business status and ownership structure of the project (sole proprietorship, company, joint venture)
- | Business contact address, including mailing and post office box details, telephone and facsimile numbers, and email address
- | Management/organisational structure (or chart), including possible names of senior personnel (if known)

In case of Company, provide the proposed shareholding of the project, including names of each of the shareholder(s), and proposed equity contribution (in Nu).

4. PROJECT LOCATION AND SIZE OF PROJECT AREA:

Provide the name of the proposed and alternative project site: name of area; city/town/village; Geog; Dungkha; Dzongkhag. Specify whether the proposed site is self-owned, to be purchased, rented, commercial building/area, government land or industrial or service estate. Explain the reasons for the selection of the site (e.g. advantages of location).

The proposed project location should be endorsed by local administration and other agencies where relevant as per the Annex

1: *Checklist for No Objection Certificate.*

Note: If the name for site is not available, provide the name of the village.

Also provide the total area that will be required by the project.

Attach map as below:

- | Provide a map in 1:500 or in appropriate scale showing the location, surrounding land use, all relevant existing infrastructure, rivers/streams and main towns. This is applicable for medium¹ - and large²- scale industrial projects only
- | For small³ and cottage⁴ industries provide a sketch depicting all details as discussed above
- | If the project requires acillary facilities (power and roads), show the nearest connections to these services on the map

5. INFRASTRUCTURE REQUIREMENTS:

Provide an assessment of the level of infrastructure facilities available at the proposed site and information on additional infrastructure (access road, power lines, telecommunication lines, water supply and sewerage, fuel storage, etc.) that needs to be constructed.

Attach a set of drawings that show the following.

¹ Investment between Nu.10 - 100 million

² Investment over Nu.100 million

³ Investment between Nu. 1 – 10 million

⁴ Investment below Nu. 1 million

- a) On A3 size paper, provide a site plan of the project that shows all of the buildings and facilities relevant to the project boundaries. These include access roads, workshop facilities, fuel and other liquid storage areas, material dumps, water and power entry points, etc. The direction of slope of the site, the scale and north
- b) Show the location of the water supply and effluent disposal facilities. Also show if required, waste disposal areas that may be used for solid and liquid waste disposal and wastewater treatment facilities together with their drainage directions. Identify these facilities such as “2000 m³ capacity, compacted earth holding pond for waste water”

If the project requires an independent powerline, the promoter needs to submit a separate application for environmental clearance, in line with the Application for Environmental Clearance, Guideline for Transmission and Distribution Lines, 2004.

For access road, the promoter needs to submit another application for environmental clearance in line with the Environmental Assessment Guidelines for Roads, 2004.

6. TECHNOLOGY/MANUFACTURING PROCESS TO BE USED

In Table 1, List the equipment and their indicative costs. Also provide the proposed source of the equipment/technology with a copy of the manufacturer(s)' brochure(s) and explain the rationale for choosing this particular technology/equipment. Also, clarify if the equipment chosen is to be operated on a single, double or triple shift basis and provide details on the number of working days assumed in one year.

The proposed production process should be described in detail along with a production flow diagram starting from raw material input to the final product.

Further, the report should provide a list of equipment that will be required by the Project with indicative costs as under:

Table 1: List of Equipment

Equipment Details	Quantity	Amount (Nu.)
1.		
2.		
3.		

7. CONSUMPTION OF RAW MATERIAL, POWER, AND WATER:

- a) In Table 2, provide information on the amount of raw materials, fuel, electric power and water required annually. Raw materials should be calculated in terms of tonnes per annum, fuel in litres per annum, power in kwh per annum, and water in cubic metres per annum. The Report should also provide the source/origin of raw materials

Table 2: Details of Raw Materials Required

Raw Materials including Power & Packaging Materials	Qty/Annum	Unit	Landed Price per unit	Value in Nu.	Source (Country)
1.					
2.					
3.					
TOTAL					

If the project requires more than 1MW of power, the promoter should obtain clearance from Bhutan Power Corporation.

- b) For project requiring import of raw materials in hard currency, the following information is mandatory
- i. In Table 3, provide a narrative description of the raw materials and packaging materials to be imported,

justification for import, annual requirement, source and price, applicable customs duty, landed price per unit at factory gate, total annual hard currency requirement and exchange rate

Table 3: Details of Hard Currency Imported Raw Materials and Packaging Materials

Raw Materials	Specification	Annual Requirement	CIF Price per unit (US\$ or other CC)	Customs Duty	Landed Price per Unit	Value in US\$ or in other CC	Source (Country)
1.							
2.							
3.							
Packaging Materials							
1.							
2.							
3.							
TOTAL							

Exchange rate US\$1 = Nu.

- ii. Value addition: Projects importing raw materials in exchange for hard currency should meet the minimum value addition requirement of 40 per cent. Value addition should be calculated as per the formula provided below and should be presented in a suitable format as in the Table 4 below. In case of more than one final product, calculate value addition for each product separately.

$$V = \frac{C - (A + B)}{C} \times 100$$

where
V= Value Addition C= Ex-factory Price of Final Product

A= Price of Imported Raw Materials B=Price of Imported Packaging Materials

Table 4: Calculation of Value Addition

Final Products	Qty/annum	Ex-factory price of final product /unit	Total cost of imported Raw Materials & Packaging Materials	Total Sales value in Nu	Value Addition% (V)
1.					
2.					
3.					

Similarly, value addition per unit should be calculated and presented for each product separately as in Table 5 below.

Table 5: Value Addition per Unit

All Raw Materials (RM)	UNIT COST OF RAW MATERIALS AT 100% CAPACITY UTILIZATION				Source (Country)
	Unit Average Consumption	Import Duty Rate	Landed Price per unit	Cost per unit of final product	
1.					
2.					
3.					
Packaging Materials					
1.					
2.					
3.					
TOTAL					
Total Cost of hard currency Imported Materials					
Ex-factory					
Price of Final Product Value Addition					

Unit Average Consumption = Quantity required to produce one unit of final product

Landed Price per unit = Landed price at factory premises including import duty

Import duty = Mention rate of import duty paid (if any)

Cost per unit of final product = unit average consumption multiplied by landed price/unit

- iii. Provide Bhutan Trade Classification (BTC) Heading as under:

Table 6: Bhutan Trade Classification Heading Change

Raw Materials	BTC Heading	Final Product(s)	BTC Heading
1.			
2.			
3.			

Further, provide the hard currency generation potential, alternative measures to meet hard currency requirement and potential for substitution of raw materials from India.

8. PROJECT COST/TOTAL INVESTMENT:

The project costs/total investment should include but not be limited to the cost (in Nu.) of the following:

- | Land
- | Site Development
- | Civil Construction
- | Infrastructure/Installation Charges
- | Plant and Equipment
- | Pollution Control Equipment and Accessories
- | Technical Know-how/Services
- | Other Pre-Operating Expenses
- | Miscellaneous/Contingencies
- | Others

Total Fixed Investment: Nu.

Working Capital: Nu.

Total Investment: Nu.

Also mention foreign exchange requirement, if any, for capital investment.

9. PROJECT FUNDING REQUIREMENTS

Describe the proposed debt/equity ratio of the project, the equity funding source(s) and the value of contributions, bank loans required for fixed asset purposes and working capital required to go into operation.

10. HUMAN RESOURCES

Specify the maximum human resource requirements of the project (at maximum level of production/sales), with a clear break-up of national/non-national requirements and requirements for professional/technical personnel separately for two project stages as under:

10.1 During Project Construction Stage

(i) Total National.....Professional/Technical:.....
Casual /Seasonal.....

(ii) Total Non-National:.....Professional/Technical:.....
Casual /Seasonal:.....

10.2 During Project Operation Stage

(i) Total National:.....Professional/Technical:.....
Casual/Seasonal:.....

(ii) Total Non-National:.....Professional/Technical:.....
Casual/Seasonal:.....

Completing this part of the Section does not automatically entitle the project promoters to employ that many non-nationals. A separate application needs to be made to the Ministry of Labour and Human Resources regarding employment of non-nationals

11. PROJECT IMPLEMENTATION PLAN

The details that should be provided here are: (i) tentative construction start date (ii) tentative completion date and (iii) tentative date for starting operations

12. MARKETS:

Provide an assessment of the domestic and export market. Explaining if the product is new or expected to substitute an existing or imported product and the special (or competitive) qualities of the product. If the product is export-oriented, provide information on the export market's target location, size, international prices, the known supply-demand gap, the promoter's marketing strategy, and current and likely competition along with a sales realization Table.

13. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

When quantifying the environmental impacts, avoid using subjective statements such as “*the project will have minimal environmental impact*”.

13.1 Consultations

The Applicant must explain to the affected people the expected impacts of the development, where they will occur and how they will be mitigated. Provide a record of the meeting/s and attach a list of the names of the people together with the date of consultation, details of their Geog and village, issues raised by the people and the agreement/s arrived at between the Applicant and them to resolve these issues. Provide signatures or other proof of consultation/s with the affected people. Describe issues that remain unresolved.

Any expansion of an existing industry will also require the same consultative procedures.

13.2 Emissions/Discharges (By Products)

13.2.1 Air Emissions

List the air pollutants that will be emitted by the proposed project. For example, the air pollutants that will be generally emitted from an industry are suspended particulates, oxides of sulphur, oxides of nitrogen and carbon dioxide.

Describe the overall air emission management plan and the kind of technology that will be put in place to mitigate/reduce air emissions. Mention to what level the proposed technology will reduce air emissions. Also, provide an estimated investment cost of the technology and its annual cost of operation.

13.2.2 Liquid Waste Discharges

List the liquid wastes and their quantity that will be discharged by the project in a suitable time frame (month, year etc.) Examples of liquid wastes include suspended solids, oil and grease, ammonia, pesticide residuals etc. If the wastes are discharged to a flowing water body, calculate the COD, BOD relationships in the receiving water.

Describe the overall liquid waste discharge management plan and the kind of treatment facilities that will be put in place. Also, provide an estimated investment cost of the treatment facilities and its annual cost of operation.

13.2.3 Solid Wastes

Prepare a table as shown below. In the first column, list the different types of solid wastes that the project will produce. In the next column show the quantity that will be produced per annum, the source of the waste and the waste disposal method that will be adopted. Also provide the estimated annual cost of managing the solid wastes.

Table 8: Solid Waste Details

Type of solid wastes	Quantity produced per annum	Source	Disposal method

13.2.4 Noise

Provide the maximum noise level (in decibels, dB) that the project will produce at the plant area and at the project boundary. Describe the measures that will be taken to minimize the noise level and the estimated annual cost for the mitigation measure/s.

13.3 Project Site Ecological Description

13.3.1 Land Use

Specify the type of land use the project will occupy. Types of land use include *Chushing, Kamshing, Tseri, Tsamdo, Sokshing*, Orchard, Broad leaf forest, coniferous forest, Scrubland, Wetland and Protected Areas.

Protected Areas include, Wildlife Sanctuaries, National Parks, Nature Reserves, Conservation Areas and Biological Corridors. Information about the location of Protected Areas can be obtained from the Nature Conservation Division, Ministry of Agriculture.

To provide information on land use and ownership, prepare a Table as illustrated below. For Protected Areas provide the name of the Protected Area.

Note: If the project is located within a Protected Area, enter Protected Area and do not go into any further detail regarding land use details.

Table 9: Land Use Details

Land use	Area	Ownership	Affected Households

13.4 Project Social Environment

13.4.1 Population

The proposed project may benefit surrounding communities in terms of employment, sale of farm products etc. Show the size of the surrounding population that could benefit from the project. It is important to cite the source of the information (own data collected through site assessment or data from the Gup, etc.)

⁵Protected Areas are regulated by the Bhutan Forest and Nature Conservation Act, 1995.

Provide the information in the tabular form as illustrated in Table 10 below.

Table 10: Project Beneficiaries

Dzongkhag	Geog	Village/ Town	Type of Benefit	Population Households (no)
Total beneficiaries				

Source:.....

13.4.2 Loss of Services, Houses, Infrastructure and Cultural Heritage Sites

This section assesses, whether the project location will cause loss of any existing houses, infrastructure and cultural or heritage sites. The impacts could either be permanent or temporary.

In tabular form, provide details on whether any of the following will be affected by the project and describe the nature of the disturbance: (i) Services (ii) Houses (iii) Infrastructure (iv) Name of cultural heritage site

Services include: telephone, electricity, water supply etc.

Houses can include shops and other buildings.

Infrastructure losses could include; roads, bridges, tracks, power and telephone lines.

Show distance (in meters) from the cultural or heritage site, if any.

Table 11: Disturbance to Existing Infrastructures

Type of Loss	(no)	Description of Disturbance
Services (list)		
Houses		
Infrastructure		
Cultural Sites		Show distance in m from project facility
Heritage Sites		Show distance in m from project facility

13.4.3 Aesthetics

Provide information on the possible adverse visual impacts that may result from the project such as whether the project will impair the aesthetic value of the immediate area. This may also include aesthetic concerns arising from the release of dust and smoke particulates into the surrounding area, disposal of solid wastes etc.

13.5 Monitoring Program

In Table 12, provide features of the monitoring program by listing the parameters that need to be monitored, the methodology of monitoring (observations, measurements, sampling etc.) and the frequency of monitoring (quarterly, biannually, and yearly).

Table 12: Environmental Monitoring

Monitoring parameter	Monitoring methodology	Monitoring frequency	Observation and comments	Person responsible for monitoring

14. PROJECT FINANCIAL PROJECTIONS

Small-scale and cottage projects should provide profit and loss statement, profitability indicators and sales realization chart.

Large- and medium-scale projects should at the minimum prepare and attach the following:

- I Financial statements: capital investments, cash flow statement, working capital calculation, interest and depreciation tables, profit and loss statement, break even analysis, and unit cost of production
- I Financial indicators: return on investment, return on equity, pay-back period, break even point, internal rate of return and net present value

15. PROJECT AT A GLANCE

This Form should be filled only after completing the main Project Report. Information for this form should be derived from the main Project Report. ***Submission of this form alone without the Project Report will not be accepted.***

1. Name of Promoter(s) :.....
2. Proposed Company/Project Name :.....
3. Contact/ Mailing Address of Promoter/Company :.....
.....
Tel No.:Fax No.:
- Email:.....
4. Proposed Legal Business Status and Ownership Structure:
 - I Sole Proprietorship
 - I Company
 - I Foreign Direct Investment

5. Proposed Project Activity:
6. Installed Capacity.....
7. Proposed Products or Services:.....
8. Proposed Location of the Business Operation:
Precise Name of Area:.....
City/Town/Village:.....Geog
Dungkhag:.....Dzongkhag:
9. Proposed Alternative Locations/Sites:
10. Status, and Size of the Site
 - | Self-owned
 - | To be purchased
 - | Rented
 - | Commercial building or area
 - | Government land
 - | Industrial or service estate
Total area required:.....sq.ft
11. Current Land Use of the Proposed Location:

Chushing	Coniferous
Kamshing	Scrubland
Tseri	Wetland
Tsamdo	Traditional and Culture Site
Sokshing	Protected Areas
Orchard	Industrial Estate (Specify)
12. Total Investment in the Project:
 - Capital Investment: Nu.mill.
 - Working Capital: Nu.mill.
 - Total Investment: Nu.mill.**

13. Foreign Exchange Needed:
 Capital Investment: US\$.....
 Recurrent Expenditure (US\$/year):
14. Sources of Project Funding:
 Shareholder(s) Funds/Equity Contribution:.....
 Debt/Loans Needed:.....
15. Manpower Requirements: Maximum Production
 (a) National:
 Professional/Technical: Casual/Seasonal:.....
 Total:
- (b) Non-National:
 Professional/Technical:Casual/Seasonal:.....
 Total:

16. Major Raw Material Requirements:

Raw Materials	Qty./Annum	Unit
1.		
2.		
3.		

17. Auxiliary Facilities Required Per Annum
 Power:
 Water:
18. Market Description:.....Domestic
 Share.....% India Share:.....% International
 Share:.....%

19. Major Environmental Pollution and Mitigation Measures

Environmental Pollution	Mitigation Measures

20. Projected Profitability Indicators:

Profitability Indicator	Year Three	Year Five
Gross Profit	Nu.	Nu.
Net Profit	Nu.	Nu.
Return on Investment (Net Profit + Interest/Total Investment (%))	%	%
Return on Equity (Net Profit, after interest, on Equity)	%	%
Pay-back Period	%	%
Break-even Point	Nu.	Nu.
Internal Rate of Return	%	%
Net Present Value	%	%

Annex 1:

Checklist for No Objection Certificate

In order to obtain an Environmental Clearance for the project, an NOC must be obtained from all relevant parties. Attach these documents to the Application. Below is a checklist of agencies from whom NOCs may be required. For projects located within designated industrial estate/area, this is not applicable.

Agency/concerned people	Why/when
Dzongkhag	Administrative approval from Dzongkhag
Department of Forest (DoF)	In case the project is proposed within the forest area
<i>Tsamdo</i> from Cabinet routed	In case the project will damage through DoF/ acquire <i>Tsamdo</i>
<i>Sokshing</i> from Cabinet, routed	In case the project will damage through DoF/ acquire <i>Sokshing</i>
National Commission for Cultural Affairs	In case the project is located within 100m of a cultural or religious site
Department of Energy	In case the project will relocate power transmission lines and the power requirement is more than one MW
Private property owners	In case the project needs to acquire private property
Department of Roads	If access road takes off from highways and feeder roads.
City Corporation	If project is located within municipal boundary

The Applicant will be responsible for ensuring that the Environmental Terms that are attached to the Environmental Clearance are carried out. These become the responsibility of the Holder of the Environmental Clearance. The Applicant will also have to provide the following plans if these are relevant. These are to be attached to the Application.

- I The Land Compensation and Resettlement Plan
- I Worker Health and Safety Plan

Annex 2(b) : THE ENVIRONMENTAL ASSESSMENT PROCEDURE OF INDUSTRIAL PROJECTS.

The Application for Environmental Clearance (EC) of a project⁶ is hereinafter referred to in this Guideline as the “Application”

1. Issuance of an Environmental Clearance is a prerequisite to the issuance of a Development Consent. (Ch II, article 8, Environmental Assessment Act, 2000)
2. The Competent Authority under the Ministry of Trade and Industry will issue the Environmental Clearance for projects that are defined in Annex 2 of the Regulation for the Environment Clearance of Projects, 2002⁷.
3. The purpose of the Application is to assist the CA or the NEC review the project and to determine the level of environmental assessment required. It is therefore, important to provide concise and accurate information when completing the Application
4. One of the main reasons for delays in making a decision to either issue environmental clearance or reject the Application is lack of adequate information in the Application. If the required information is not provided in detail, the CA or the NEC will have to seek further clarification from the Applicant which extends the review process
5. If the Application is subject to further studies e.g. a further environmental assessment the Applicant will need to submit Terms of Reference for the subsequent detailed investigations to the NEC for approval. (Article 15, Env. Act, 2002).

⁶To establish a project without an Environmental Clearance, or to provide false, misleading or inaccurate information shall be an offence under Article 49 of the EA Act, 2000 and Section 36 and 37 of the Regulation for the Environmental Clearance of Projects, 2002.

⁷Each year the NEC requests the various Competent Authorities to review and add projects to Annex 2. Thus while the Regulation was issued in 2002, Annex 2 has and will continue to be revised. The latest issue of the Regulation needs to be referred to for the most recent update of Annex 2.

6. If a section is not relevant to your project, explain why it is not relevant
7. The numbering of sections for the Application should start from 1. Persons completing the Application are not obliged to maintain the same numbering sequence as used in the Guideline

Annex 3: Glossary of Environmental Terms

Affected people: individuals, groups or communities whose interests may be directly affected by the location, construction and operation of the project

Agency: a ministry, department, municipality established under the Bhutan Municipal Act, 1999 or any autonomous body of the Royal Government of Bhutan

Applicant: a person seeking an Environmental Clearance from a Competent Authority or from the National Environment Commission

Application: is the output of this guideline which is submitted to either the Competent Authority or the NEC for approval

Competent Authority. Any agency of the Royal Government that has the power to issue an Environmental Clearance for a project

Cultural Heritage: tradition or culture that should be preserved for future generations

Development Consent: the approval that is issued or renewed by a Competent Authority in the form of a licence, lease or permit for land use or construction. The Development Consent can only be obtained after the Environmental Clearance has been issued

Distribution line: power lines with voltages below 66 kilovolts

Environmental Assessment: all procedures required under Bhutanese law to identify means to ensure that the activities of a project are managed in an environmentally sound and sustainable way

Environmental Clearance: the decision issued under Chapter III of the Environmental Act, 2000, issued in writing by the National Environment Commission or the Competent Authority, to let a project proceed, which includes terms to ensure that the project is managed in an environmentally sound and sustainable way

Environmental Management Plan: a plan which addresses the ways of mitigating and monitoring the impacts that have been identified by the environmental assessment. The Environmental Management Plan may comprise part of the conditions of the Environmental Clearance that is issued either by the Competent Authority or by the National Environment Commission

Environmental Parameter: A component of the surrounding environment which may be altered by a project activity. This includes physical interventions or releases to air, water and soil which may in turn affect vegetation, wildlife, human and aquatic communities.

Environmental Terms: the requirements and conditions that a project must comply with, as stated in the Environmental Clearance issued either by the NEC or the CA

Environmental Unit: a management unit that is established within the project structure that is responsible for implementing, monitoring and reporting on the Environmental Terms attached to the Environmental Clearance

Forest: any land or water body, whether or not under vegetative cover, in which no person has acquired a permanent and transferable right of use and occupancy, whether such land is inside or outside the forest boundary pillars, and includes land registered in a person's name as *Tsamdo* (grazing land) or *Sokshing* (woodlot for collection of leaf litter)

Holder: the recipient of an Environmental Clearance under Chapter III of the EA Act, 2000

Land acquisition: the acquisition of any land, constructions or other property in accordance with the procedures established under the Land Act, 1979 (or successor legislation)

Monitoring a program of systematic measurement or observation of environmental and social parameters. Monitoring requirements includes regular reporting and specifies action to be taken if non-compliance occurs. Monitoring requirements are specified in the Environmental Terms which is attached to the Environmental Clearance. Monitoring consists of *Baseline monitoring* which is carried out prior to a project commencing. Baseline monitoring measures the existing environment and this is compared to later monitoring which establishes the effects caused by the project

Compliance monitoring refers to a system of regular measurements which compares releases from an activity to those that have been specified in the Environmental Terms. The permitted releases are established in environmental standards

Municipal Corporation: a Corporation incorporated under the Bhutan Municipal Act, 1999, to implement the provisions of that Act for the benefit of the residents of a community classified as a Municipality by the Royal Government

Non-listed project: all projects that are not listed in Annex 2 of the Regulation for the Environmental Clearance of Projects, 2002 including its most recent update

Project: an activity which may have significant effects on the environment

Project area: the area that includes the immediate and the proximate area of a project that the project may have an environmental or social impact on

Protected Area: is an area which has been declared to be a national park, conservation area, wildlife sanctuary, wildlife reserve, nature reserve, strict nature reserve, research forest, critical watershed or other Protected Areas for the preservation of areas of natural beauty of national importance, protection of biological diversity, management of wildlife, conservation of soil and water and related purposes

Screening: : the review process carried out by the National Environment Commission or by the Competent Authority of the Application with regard to whether the project may be (i) issued with an EC (ii) rejected or (iii) require further environmental assessment

Sustainability: development that recognises the need to raise the living standards of the present population without compromising the country's resource base, cultural integrity, historical heritage or the quality of life of future generations

Transmission line: conveyance of electricity at voltages above 66 kilovolt

Wildlife: includes all mammals, avian, reptiles, amphibians, fishes and invertebrates