

GOVERNMENT  
No. 175/ CP

SOCIALIST REPUBLIC OF VIETNAM  
*Independence - Freedom - Happiness*

*Hanoi, October 18, 1994*

GOVERNMENT DECREE  
on providing Guidance for the Implementation  
of the Law on Environmental Protection

THE GOVERNMENT

- Pursuant to the Law on Organization of the Government dated September 30, 1992;
- Pursuant to the Law on Environmental Protection dated December 27, 1993;
- On the proposal of the Minister of Science, Technology and Environment

DECREES:

CHAPTER I

General provisions

Article 1:

This Decree shall make detailed stipulations for the implementation of Law on Environmental Protection passed by the National Assembly of the Socialist Republic of Vietnam on December 27, 1993 and announced by Decision No.29L/CTN dated January 10, 1994 of the President of State.

Article 2:

The Provisions of this Decree are applied to all activities of all Vietnamese organizations, individuals and all foreign organizations and individuals living and working on the territory of the Socialist

Republic of Vietnam as prescribed in the Law on Environmental Protection.

**Article 3:**

Those provisions environmental protection relating to international relations have to be implemented in accordance with provision of Law on Environmental Protection with other relevant provisions of the Vietnamese Law and of the international treaties signed or participated by Vietnam.

In the case the provisions of the international treaties signed or participated by Vietnam are different from those of this decree, the provisions of those international treaties shall be applied.

**CHAPTER II**

**Distribution of Responsibility of State Management  
on Environment Protection; Responsibility of Organizations and  
Individuals for Environment Protection**

**Article 4:**

1) The Ministry of Science, Technology and Environment undertakes the integrated State management on environmental protection on a nation-wide scale and bears responsibility to organize and direct activities of environmental protection within its functions and duties such as:

- a. To work out and present to the Government to promulgate in accordance with its authority the legal documents on environmental protection;
- b. To work out strategies and policies of environmental protection and present them to the Government for promulgation;
- c. To preside over the drafting process, to present documents to the Government for decision and to coordinate in organizing

implementation of long-term and yearly plans on preventing, resisting and overcoming environmental deterioration, pollution, incidents and on the projects of environmental protection and projects relating to environmental protection.

d. To organize, construct and manage a general system of experimental observation of the environmental;

e. To access the environmental status quo of the whole country and to periodically report to the Government and the National Assembly on its findings.

f. To appraise the reports on assessment on environmental effects of the projects and local units as prescribed in Chapter III of this Decree.

g. To conduct research work and provide guidance for the application of scientific and technological advances in the field of environmental protection; to organize the formation and application of a system of environmental standard; to issue, withdraw certificates acknowledging environmental standards to organize training courses for environmental scientists and cadres of environmental management and protection;

h. To provide guidance and to inspect other branches, localities, organizations and individuals in the implementation of the law Environmental Protection; to organize environmental inspection; to handle complaints and charges relating to environmental protection within its scope of authority.

i. To present to the Government all proposals on the participation of international organizations, the signing or participating of international treaties on environmental protection, to carry out activities relating to environmental protection.

2. The Environmental Department bears responsibility for assisting the Minister of Science, Technology and Environment to perform the function of state management of environmental protection on a nation-wide scale.

The tasks, powers, and organization of the Environment Department shall be stipulated by the Minister of Science, Technology and Environment.

#### Article 5:

1. The Ministries, Ministerial ranking bodies and offices belonging to the Government, according to their scope of responsibilities and in accordance with the provisions of law on Environmental Protection, such as:

- a. To draft and propose the Government to issue in accordance with its authority, the legal documents of environmental protection within their scope of responsibilities and in accordance with the provisions of the law on Environmental Protection.
- To work out their own strategies and policies of environmental protection in accordance with the general strategy and policy of environmental protection of the whole country.
- b. To direct and inspect the implementation of the provisions of the Law, the plans and measures of environmental protection in accordance with the guidance of the Ministry of Science, Technology and Environment within their own branches and the units under their own direct management.
- c. To manage their own branches' projects relating to environmental protection.
- d. To coordinate in appraising the reports on assessment of environmental effects of the projects, the production, business units in accordance with the provisions in Chapter III of this Decree.
- e. To handle the disputes, claims, charges and to propose measures to deal with violations of environmental protection within the authority prescribed by the Law.

2. The Ministries, Ministerial - ranking bodies, offices belonging to the Government coordinate with the Ministry of Science, Technology and Environment to conduct the following activities:

- a. To investigate, observe, study and assess the current environmental situation within their own branches.
- b. To draft and present proposals to the Government for decision and to organize the implementation of plans on preventing, resisting and overcoming environmental deterioration, pollution and incidents within their own branches.
- c. To study and apply the scientific and technological advances in the field of environmental protection within their own branches.
- d. To educate, propagandize and spread the knowledge, laws on environmental protection within their own branches.

#### Article 6:

1. The People's Committees of provinces and cities under Central Government bear responsibilities for the implementation of state management on environmental protection, such as:

- a. To issue, in accordance with their authorities, legal documents of environmental protection in their localities.
- b. To direct and inspect the implementation of the state and local regulations on environmental protection within their own localities.
- c. To appraise the reports on assessment of environmental effects of the projects and local units as prescribed in Chapter III of this Decree.
- d. To issue and withdraw certificates acknowledging environmental standards of the production, business enterprises.
- e. To coordinate with the Central offices in examining, inspecting and dealing with violations of law on environmental protection in their own localities, to remind other organizations

and individuals to realize the provisions of Law on Environmental Protection.

f. To receive and handle the disputes, complaints, charges and proposal on environmental protection in their own assigned powers or forward to the authoritative offices for settlement.

2) The provincial Department of Science, Technology and Environment are responsible before the People's Committees of the provinces and cities under Central Government for the implementation of state management environmental protection in their localities.

The tasks, powers and machinery organization of the provincial Department of Science, Technology and Environment are stipulated by the People's Committees of the provinces and cities under Central Government in accordance with the guidance of the Ministry of Science, Technology and Environment.

#### Article 7 :

The state offices and mass associations of people bear the following responsibilities in environmental protection :

1) To assure strict implementation, within their offices and associations, of all the regulation of the law, of the Central offices and local authorities on environmental protection.

2) To propagandize and educate so as to raise the sense of responsibility of each member of the offices and associations on environmental protection.

3) Within their own scopes of responsibility and powers to inspect, educate or observe the implementation of the laws on environmental protection, to timely discover and report violations of laws on environmental protection to the authoritative offices for settlement.

#### Article 8 :

All production and business organizations have to strictly comply with the provisions of laws on :

1) Assessing environmental impact; assuring the correct implementation of environmental standards; preventing, resisting and overcoming environmental deterioration, pollution and incidents.

2) Contributing finance to the cause of environmental protection and compensating for damages resulting from detrimental acts to the environment, as prescribed by the law.

3) Providing complete documents and creating favorable conditions for inspecting delegations or inspectors while they are conducting their missions; complying with the decisions of the inspecting delegations or inspectors.

4) Conducting propaganda and educational operations to raise the conscience of cadres and workers in environmental protection; periodically reporting to the offices in charge of state management of environmental protection in their localities on the current situation of environment in their operating areas.

### CHAPTER III

#### Assessment of environmental impact

#### Article 9 :

The investors, project managers or directors of the offices and enterprises...belonging to the following areas have to conduct assessment of environmental impact :

1) The overall strategies for regional development, strategies and plans for development of provinces and cities under central government, strategies for urban and population development;

2) The economic, scientific, healthcare, cultural, social, security and defence projects;

3) Projects being carried out on the territory of Vietnam with the funds invested, assisted, granted or contributed by foreign organizations or individuals or international organizations.

- 4) The projects mentioned in items 1, 2 and 3 of this Article being approved before January 10, 1994 but not yet assessed environmental impact as required;
- 5) The economic, scientific, healthcare, cultural, security and defence units that have been operating before January 10, 1994.

#### **Article 10 :**

- 1) The scope for assessing environmental impact includes :
  - a. To assess the current situation of the environment in the operating area of the project or unit.
  - b. To assess impact occurring to the environment as a result of the activities of the project or unit.
  - c. To present measures for environmental resolution.
- 2) All the contents mentioned in this Article are presented in a form of a separate report called Report of Assessment on Environmental Impact.

#### **Article 11 :**

- 1) For the objects mentioned in items 1, 2, 3 and 4 of Article 9, the formation of reports of assessment on environmental impacts shall be conducted in two stages : Preliminary and Detailed ( the objects exclusively mentioned in item 4 have to make detailed assessment only).

The contents of the report of preliminary assessment on environmental impact are stipulated in Appendix I.2.

- 2) For the objects mentioned in item 5 of Article 9, the contents of a report of assessment on environmental impact are stipulated in Appendix I.3.

#### **Article 12 :**

- 1) The methods used to assess environmental impact must be, by their nature, objective, scientific, practical and in accordance with the current international standards.

- 2) Reports of assessment on environmental impact must be made by offices and organizations with adequate professional expertise and facilities.

- 3) All organizations and units have to use Vietnamese environmental standards to prepare reports of assessment on environmental impact. Those fields whose environmental standards have not been set up, have to get agreement, in the form of documentation, from the offices in charge of state management on environmental protection.

#### **Article 13:**

A dossier for appraising a report of assessment on environmental impact includes:

- 1) For those objects mentioned in items 1, 2, 3, and 4 of Article 9:
    - a. A report of assessment on environmental impact.
    - b. Dossier of the project and related appendixes.
  - 2) For those objects mentioned in items 5 of Article 9:
    - a. A report of assessment on environmental impact
    - b. A report on the current situation of production and business operations and other relevant issues of the unit.
  - 3) All documents in a dossier for appraisal are made in 3 copies.
- For the objects mentioned in item 3 of Article 9, the documents should be made in Vietnamese.

#### **Article 14:**

- 1) The work of appraising report of assessment on environmental impact by ongoing projects and operating units is separated into two levels
  - a. The Ministry of Science, Technology and Environment shall appraise the Central level. In certain cases, the Ministry of Science, Technology and Environment can empower a specialized branch to conduct the appraisal;

b. The local level shall be appraised by the provincial Departments of Science, Technology and Environment.

The division of appraising power is recorded in Appendix II.

2) The Ministry of Science, Technology and Environment is responsible for presenting the Government a list of projects whose reports of assessment on environmental impacts should be introduced to the National Assembly for consideration.

#### **Article 15:**

1) The offices assigned with State management of environmental protection are responsible for appraising reports of assessment on environmental impact.

2) In case of necessity, an Appraising Council shall be set up.

a. The Ministry of Science, Technology and Environment shall decide the establishment of an Appraising Council at the Central level.

b. The chairmen of the People's Committees of the provinces and cities under Central Government will decide the establishment of Appraising Councils at the provincial level.

3) The composition of an Appraising Council includes scientists, managing officials, possibly the representatives of social organizations and ordinary people. The number of Council members cannot exceed 9.

#### **Article 16:**

The period of time for appraising a report of assessment on environmental impact can not be longer than 2 months from the date all related documents are received.

For the objects mentioned in item 3 of Article 9 the period of time for appraisal must be in harmony with the period of time prescribed for issuing investment licences.

#### **Article 17:**

Offices assigned with state management of environmental protection are responsible for the supervision of artistic design and conducting measures to protect the environment according to the suggestions of the Appraising Council.

#### **Article 18:**

In case, they do not agree with the conclusions of the Appraising Council, the investors, project managers of directors of the enterprises, units etc. ... have a right to make complaints to the office which decided the establishment of the Appraising Council and to the upper-level office assigned with state management of environmental protection.

The complaints have to be considered and resolved in a maximum period of 3 months since the date the complaints are received.

#### **Article 19:**

For those objects mentioned in Article 9 of this Decree being controlled by the Ministries of Defence and Interior, the Ministers of Defence and Interior shall conduct the making and appraising reports of assessment on environmental impacts in accordance with the guidance of the Ministry of Science, Technology and Environment.

#### **Article 20:**

1) For the objects mentioned in item 5 Article 9 of this Decree, the making and appraising reports of assessment on environmental impact must be conducted step by step and within a fixed time according to the guidance of the Ministry of Science, Technology and Environment.

2) The results of the appraisals over reports of assessment on environmental impact of the operating enterprises and units are classified into the 4 following categories for settlement:

- a. Being permitted to continue its operations without environmental penalty;
- b. Having to invest in building facilities to deal with the wasted materials;
- c. Having to change the technology, to move to other place;
- d. Having to suspend its operations.

## CHAPTER IV

### Preventing, Resisting and Overcoming Environmental Deterioration, Pollution and Incidents

#### Article 21:

The utilization and exploitation of national gardens, natural preservation areas, areas of historical and cultural values relics, natural scenery etc... must be permitted by the management body of the concerned branch. Before issuing licenses, the management body of concerned branch has to obtain agreement (in writing) from the state management office for environmental protection.

After receiving documents permitting utilization and exploitation, the organizations or individuals whose names are recorded in the licences, have to conduct registration procedures with the local authorities who directly control the above-mentioned preservation areas.

In a licence, the following contents must be clearly recorded: The object and scope being granted for utilization, the purpose and duration of exploitation, the precautions and measures for environmental protection during exploitation.

#### Article 22:

Those organizations and individuals conducting operations relating to the environment have to comply with environmental standards.

The kinds of Vietnamese environmental standards includes:

- 1) Environmental standards for land protection
- 2) Environmental standards for water protection
- 3) Environmental standards for air protection
- 4) Environmental standards to regulate noise pollution
- 5) Environmental standards in the field of radiation and ionization
- 6) Environmental standards for environmental protection in residential areas
- 7) Environmental standards for environmental protection in production areas
- 8) The standards for environmental assessment in the field of forestry protection;
- 9) The standards for environmental assessment in the field of protection of biological systems;
- 10) The standards for environmental assessment in the field of protection of ecological systems;
- 11) Environmental standards for protection of the sea and oceans;
- 12) Environmental standards for the protection of natural preservation areas and natural landscapes;
- 13) Environmental standards in the field of planning for industrial, urban and civil constructions;
- 14) Environmental standards concerning the transportation, storage and utilization of toxic and radioactive materials;
- 15) Environmental standards in the exploitation of surface and underground mines.
- 16) Environmental standards for motorized transportation.
- 17) Environmental standards for establishments using micro-organisms;
- 18) Environmental standards for environmental protection of tourist areas.
- 19) Environmental standards in the field of export and import.]
- 20) Environmental standards for hospitals and special illness-treatment areas.

The Ministry of Science, Technology and Environment shall coordinate with the related ministries and branches in preparing and issuing standards on the above list.

**Article 23 :**

All organizations and individuals when exporting or importing species of animals, vegetation (including seeds), micro-organisms and gene sources must have permission from the management body of the concerned branch and the office for state management of environmental protection and must also obtain certificates of epidemic tests from an authoritative office for epidemic control in Vietnam. When these organizations and individuals discover that the objects defined in the licences are likely to pose a danger by causing epidemic diseases to human beings, cattle, poultry or by causing environmental pollution or deterioration, they have to urgently report to the nearest local authority and office for State management of environmental protection to enable immediate measures to deal with the problem by confinement or elimination, to be taken.

For precious and rare animals, and vegetation as defined in "Convention on International Trade of Endangered Species" (CITES) all organizations and individuals have to strictly comply with the Law on Forestry Protection and Development and the Ordinance on Protection of Aquatic Resources. The list of sorts and species of those objects mentioned in this article are released by the Ministry of Forestry (Appendix III), the Ministry of Fisheries, the Ministry of Agriculture and Foodstuff Industry.

**Article 24:**

Any organizations and individuals wishing to export or import toxic chemicals and biological products have to obtain permission from the management body of the concerned industries and the State management body for environmental protection and also must strictly comply with current Vietnamese standard.

In applications, the exact purpose of the utilization, quantity, special technical characteristics, composition, formula (if available), commercial name, name of the company with produced it and the name of the country where it was produced must be made clear. These organizations and individuals have to export or import the exact types and amounts as defined in the licenses.

In case the above - mentioned materials and products' usefulness has expired, thus requiring disposal, their owners must reveal the amounts of waste, special technical characteristics and the disposal technology clearly, and the disposal process must be supervised by the body for state management of environmental protection and the empowered office of public security.

With chemicals of vegetation protection, they have to strictly comply with the Ordinance on vegetation Protection and Epidemic Control.

**Article 25:**

The imports of complete equipment and technology as required by projects and joint ventures can only be conducted after economic - technical justifications have been approved together with the appraisal conclusion on reports of assessment on environmental impacts of the projects made by the body for state management on environmental protection.

For the important separate equipment of environmental protection, when considering them necessary, the body for the state management on environmental protection shall consider and grant permission for importing.

The distribution of power to deferent levels to grant licenses for this kind of operation shall be as follows:

- The Ministry of Science, Technology and Environment shall issue import licenses to those projects and joint - ventures approved by the State Council of Appraisal.

The provincial Department of Science, Technology and Environment shall issue licenses for the remaining cases in accordance with the guidance of the Ministry of Science, Technology and Environment.

#### Article 26:

1. All transportation means operating on land, railway and water surface are not allowed to emit smoke, dust, oil, and gas containing toxins surpassing the defined standards in to the surrounding environment (Appendix IV). For the above mentioned transportation means, if they are imported into Vietnam after the Law on Environmental Protection came into effect, they have to meet the requirements of waste standards before being operated.

2. For all engine - transportation means, when their owners operate them, they have to ensure that the noise level does not surpass the stipulated levels (Appendixes V1, V2, V3 and V4).

For the transportation means being granted permission to operate before the effective date of the Law on Environmental Protection, their owners have to apply technical alterations to minimize the amounts of smoke and toxic waste emitted into the environment. From April 1, 1995 all motorized transportation means operating in urban areas have to guarantee that the smoke levels emitted does not exceed 60 Hartridge units, they are not allowed to emit the above - mentioned substances causing environmental pollution, nor cause noise surpassing the permitted levels.

Any means of transportation failing to reach the above - mentioned standards shall be suspended from operation.

4. The owners of engine - transportation means if passing hospitals, sanatoria, schools and densely populated residential areas at rest time (noon) and after 22.00 hours are not allowed to use horns.

The Ministry of Transportation and Communications is responsible for organizing the examination and issue of licences for

transportation means, acknowledging their satisfaction of environmental standards.

#### Article 27:

1. All production and business establishments, hospitals, hotels, restaurants etc. ... having the discharged substances in forms of solid, liquid and gas have to organize the treatment so as to reach environmental standards before discharging out of the management scope of their establishments, the technologies for treatment of the above - mentioned discharged substances have to be approved by the authoritative body of state management.

2. Everyday, discharged substances in urban and industrial areas have to be collected, transported and treated in accordance with regulations on management of discharged substances.

3. Discharged substances containing toxic chemicals which are hard to dissolve have to be treated by a separate technology instead of being discharges into the areas for daily life discharged substances.

#### Article 28:

1. The import and export of discharged substances containing toxic elements or pathogenic microbes possibly causing environmental pollution are prohibited.

2. The Ministry of Science, Technology and Environment shall provide guidance for all branches and localities to make the lists of secondary and wasted materials which satisfy the standards of environmental hygiene and therefore are allowed to import as production materials so as to present them to Prime Minister of the Government for decision.

#### Article 29:

From January 1<sup>st</sup>, 1995, the production, transportation, trading, storage and use of all kinds of crackers are prohibited on the whole territory of Vietnam.

The Government shall make stipulations about production and use of fireworks on some special holidays and festivals.

**Article 30:**

1. The Ministry of Science, Technology and Environment shall submit to the Prime Minister of the Government the specially serious cases of environmental incidents and propose the urgent measures of treatment for the Prime Minister to decide.
  2. The specially serious cases of environmental incidents are those causing immense and serious damages to:
    - a. Lives and properties of several people.
    - b. Economic, social, security and national defense establishments.
    - c. Widespread area of many provinces' and cities' territory.
    - d. Area of international influence.
  3. The Minister of National Defence and the interior will organize a specialized force to act as a key instrument in coping with environmental problems.
- The Ministry of Science, Technology and Environment working together with the Ministries of National Defence and Interior and related ministries and branches will work out the plan to form this force and submit the plan to the Prime Minister of the Government for his / her decision.

**Article 31:**

The payment of costs in overcoming environmental incidents for organizations and individuals that are mobilized shall be conducted on the principle of agreement between the mobilized organizations, individuals and the with the authority to mobilize.

The Ministry of Finance shall make detailed stipulations for this kind of payment.

## **CHAPTER V**

### **The Financial Sources for the Task Environment Protection**

**Article 32:**

The financial sources for the task of environment protection include:

1. The State budget allocation for activities of environmental protection, for the tasks of scientific research and state management on environmental protection;
2. Fees of appraisals over assessment reports on the environmental impacts of socio - economic projects; fees of environmental protection contributed in accordance with the detailed stipulations of the Ministry of Finance by organizations and individuals who utilize environmental components for the purposes of production and business.
3. Other sources ( such as fines charged on administrative violations, funds contributed by any socio - economic organizations).

**Article 33:**

The Government shall establish a National Reserve Fund for dealing with environmental deterioration, pollution and incidents. This Fund will be used to cope with emergency cases of environmental incidents, pollution and deterioration.

The financial sources for the above - mentioned Fund includes money extracted from the State Budgets, contributions from difference enterprises (including joint - ventures with foreigners), contributions by organizations and individuals in and outside of Vietnam, to activities of environmental protection in Vietnam.

The Ministry of Science, Technology and Environment and the Ministry of Finance will work out management regulations and use of this Fund.

#### Article 34:

All organizations and individuals who conduct production and business operations in the following fields or with the following objects have to pay fees for environmental protection:

- Exploiting oil, gas or other mineral resources;
- Airports, sea - ports, bus - stations, railway - stations;
- Motorized transportation;
- Other fields of production and business causing environmental pollution.

Foreign organizations and individuals conducting production and business operations which cause environmental pollution have to pay environmental protection fees.

The fee level depends on the harmful level possibly caused to the environment by production and business operations.

The Ministry of Science, Technology and Environment and the Ministry of Finance shall provide detailed guidance on collection and use of environmental protection fees.

#### Article 35:

The financial sources for the task of environmental protection shall be spent annually on the following activities:

1. Basic surveys on environmental elements, especially of land, water, air, forest, sea, and related cultural sites ...
2. Surveys on situations of environmental pollution in big provinces and cities, industrial areas, condense residential areas, water areas of ongoing oil exploitations ...
3. Measures of environmental protection, restoration and improvement and of management of discharged substances (especially toxic ones) in cities and industrial areas;
4. Projects of preservation and restoration of ecological systems having important meaning to the sustainable socio - economic development and biological diversification (including national

gardens, protected natural reserves, the ecological systems of submerged land in river estuaries and coast line, the ecological systems of salt - marsh forests, submerged coral reefs, rare and precious species of creatures, protection of gene resources ...)

5. Basic construction of necessary facilities for environmental protection.

#### Article 36:

The Ministry of Science, Technology and Environment and the Ministry of Finance shall make stipulations on the collection, payment and management of finance and properties in operations of environmental protection in accordance with the existing regime of management.

### CHAPTER VI

#### Inspection of Environmental Protection

#### Article 37:

The Ministry of Science, Technology and Environment bears responsibility before the Government to organize and conduct the implementation of professional inspection on environment protection, with the following duties:

1. To inspect the activities of environmental protection of all ministries and branches and the performance of state management in environmental protection of the People's Committees of different levels in their localities.
2. To inspect the compliance with provisions of the Law on Environmental Protection: Standards, regulations on preventing, resisting and overcoming environmental deterioration, pollution and incidents when utilizing and exploiting environmental components by organizations and individuals.

**Article 38:**

The organization, power and scope of activities of professional inspection on environmental protection will be unanimously stipulated by the Minister of Science, Technology and Environment and the State's General Inspector in accordance with provisions of the law on Environmental Protection and the Ordinance on Inspection.

**CHAPTER VII**  
**Provisions for Implementation**

**Article 39:**

This Decree shall come into effect from the signing date. All previously issued regulations which are contrary to this Decree shall be hereby repealed.

**Article 40:**

All Ministries, Heads of Ministerial ranking bodies, Heads of Offices belonging to the Government; Chairpeople of People's Committees of provinces and cities under Central authorities are responsible for providing detailed guidance, according to their functions and powers, for the implementation of this Decree.

On behalf of the Government  
The Prime Minister  
Signed VO VAN KIET

**Appendix I.1**  
**THE CONTENTS OF THE REPORT FOR THE PRELIMINARY**  
**ENVIRONMENTAL IMPACT ASSESSMENT**

**I. INTRODUCTION**

1. Objective of the Report
2. Document, Data Base of the report
3. Brief project description

**II. DATA OF THE ENVIRONMENTAL SITUATION.**

Qualitative, quantitative assessment, in the case where there is no quantitative data then classing according to degree: Heavy, medium, light, unknown by each natural factors (water, soil, air...)

**III. ENVIRONMENTAL IMPACT ASSESSMENT DURING PROJECT IMPLEMENTATION.**

General assessment according to the main factors:

1. Air
2. Water
3. Noise
4. Rock
5. Ecosystem
6. Solid waste
7. Historical landscape
8. Infrastructure
9. Transportation
10. Community Health's
11. Other factors.

**IV. CONCLUSIONS AND RECOMMENDATIONS**

1. conclusion on the Environmental Impact of the project.
2. Recommendation to the problems that need to have detail assessment.

Appendix I.2

**THE CONTENT FOR DETAILED ENVIRONMENT;  
IMPACT ASSESSMENT REPORT**

**I. INTRODUCTION**

1. Objective of the Report
2. Document, Data Status of the Report
3. Selection of the Assessment Method
4. Organization, members, method and the process used in preparing report

**II. BRIEF DESCRIPTION OF THE REPORT.**

1. Name of the project
2. Name of the Holder, the agency implement the setting up feasibility study or documents equivalent to the project value.
3. Socio-economic objective, the political significant of the project.
4. the main contents of the project. The socio-economic benefit that project can provide
5. Project progress, plan for project exploitation.
6. Project cost, cost process.

**III. ENVIRONMENTAL STATUS AT THE PROJECT LOCATION.**

1. General description of the geographical, socio-economic conditions related to the project location.
2. Forecast of the conditions if the project is not implemented

**IV. IMPACT OF THE PROJECT IMPLEMENTATION TO THE ENVIRONMENTAL AND NATURAL RESOURCES FACTORS.**

1. Description of the Impact to the project implementation to each Environmental factor at the project locations. Presenting the

characteristics, degrees, and occurrences at each time of the impact. Compare to the circus stance of not implementing project.

*A. Impact of the physical environmental forms water quality, air quality (Hydrospheres, atmospheres...)*

*B. Impact to the Biological resources and ecosystems*

1. Aquatic ecosystems
2. Terrestrial ecosystems

*C. Impact to the Natural Resource and Environment.*

1. Water supply
2. Transportation
3. Agriculture
4. Irrigation
5. Energy
6. Exploration
7. Industry
8. Small Industry
9. Land use to other objections
10. Creation, Heals protection.

*D. Impact to the direct condition that impact to the people living quality.*

1. Socio-economic condition
2. Cultural condition
3. Aesthetic

2. General environmental assessment in the case of the project implementation.

Analysis of the synthetic Environmental development for each alternative for project implementation.

The damages to natural resources and environment resulting from each alternative. The measures overconing.

In this part, it needs to avail.

- The material inputs to production
- The waste of the production.
- The products
- Impact forecast of these materials to environment.

3. The mitigating measures to limit negates impact of the project on the environment.

Presenting in a detailed manner the technical measures, technology, management for overcoming the negative impact on the environment of the project.

Comparing the resulting benefits and the costs for each alternative of the project.

#### 4. General assessment.

General assessment of the degree of condense of the forecast of the environmental impact assessment. The study, investigation, survey that would be required for more confident conclusion and further adjust of the forecast of the environmental impact assessment in the future.

### **V. RECOMMENDATIONS ON THE ALTERNATIVE FOR PROJECT IMPLEMENTATION.**

1. Recommendation for alternative selection to implement the project base on the environmental point of view.

2. Recommendation for the Environmental protection measures associated with the approved alternative.

### **Appendix I.3**

## **THE CONTENT OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT TO THE OPERATING UNITS**

### **I. INTRODUCTION**

1. Objective of the Report
2. Document data of the report
3. Brief summary of the operation, capacity, material, product, insurance and worker's salary.

### **II. BRIEF ON THE OPERATING UNIT, TECHNOLOGY AND EFFICIENCY OF THE UNIT ETC.**

### **III. BRIEF DESCRIPTION OF THE ENVIRONMENTAL STATUS AT THE LOCATION.**

- Biological factors: inland and water ecosystems.
- In- Physical factors: water, soil, air...
- infrastructure: water supply and drainage transportation, Irrigation.
- Socio-economic conditions and community health.

### **IV. IMPACT ASSESSMENT TO THE UNIT'S ENVIRONMENT.**

- Criteria for assessment.

1. Air
2. Water
3. Noise
4. Soil
5. Ecosystem
6. Waste
7. Landscape, Historical relies
8. Infrastructure
9. Transportation
10. Community health.
11. Others.

## Appendix II. APPRAISAL DECENTRALIZATION OF EIA - REPORT

For each of the above criteria, it needs to determine in qualitative quantitative manner (compared with the standard in the case there isn't the quantitative data then classify according to the degrees: Heavy, medium, light, unknown etc...

General assessment of the environmental damages: The gain and loss of the socio-economy.

### V. ENVIRONMENTAL SETTLEMENT ALTERNATIVE.

Dictate the technological alternative and processed technology, cost requirement and the implementation.

### VI. CONCLUSION AND RECOMMENDATION

- Main conclusions
- Recommendation on the alternatives and measures for reducing the impact caused to the operating unit.

	Operating projects and enterprises	MOSTE	OSTE
1	Mining	Big and medium mine	Small
2	Oil exploring and refinery, oil chemicals and gas; Oil	All	
3	Chemical plant	All	
4	Steel plant	All	
5	Non-ferrous metal plant	All	
6	Leather plant	Over 1000 T/year	Rest
7	Textile plant	Over 30 mil m/year	Rest
8	Plant protection chemical plant	All	
9	Rubber and paint plant	All	
10	Plastic plant	Over 1000 T/year	Rest
11	Radiation plant	All	
12	Airport	All	
13	Export processing zone	All	
14	Hydropower dam water reservoir	Over 100 mil m <sup>3</sup> /year	Rest
15	Irrigation system	Above limitation	Rest
16	Thermal and other kinds of power plants	Over 30 MW	Rest
17	Cement plant	Over 500,000 T/year	Rest
18	Paper and paper pulp mill	Over 40,000 T/year	Rest
19	Pharmaceutical plant	Central	Rest
20	Fertilizer plant	Over 100,000 T/year	Rest
21	Food processing factory	Over 1000 T/year	Rest
22	Sugar plant	Over 100,000 T/year	Rest
23	Hospital	year	Rest
24	Railway, Motorway of grades 1, 2, 3	Over 500 beds Over 50 kms	Rest Rest

### Appendix III

#### LIST OF PRECIOUS FOREST PLANTS AND ANIMALS

##### GROUP I:

##### A. Forest plants:

	Vietnamese name	Scientific name	Note
1	2	3	4
1	Bách xanh	Calocedrat macrolepis	
2	Thông đỏ	Taxus chinensis	
3	Phi ba mũi	Cephalotaxus fortunei	
4	Thông tre	Podocarpus nerifolius	
5	Thông Pà cò	Pinus kwangtungensis	
6	Thông Đà Lạt	Pinus dalatensis	
7	Thông nước	Glyptostrobus pensilis	
8	Hình đá voi	Kaleleria calcarea	
9	Sam bóng	Amentotaxus argotenia	
10	Sam lạnh	Abies nukiangesis	
11	Trầna (gió bầu)	Aquilarin crassna	
12	Hoàng đàn	Copressus torulosa	
13	Thông hai lá dẹt	Ducampopinus krepii	

25	Power transmission station	Over 110 kV	Rest
26	Tourism and entertainment resort	Over 100 ha	Rest
27	Oil and gasoline store	Over 3000 m <sup>3</sup>	Rest
28	Poisonous chemicals store	All	Rest
29	Plantation	Over 2000 ha	Rest
30	Wood exploiting farm	Over 3000 ha	Rest
31	Industrial forestation farm	Over 2000 ha	Rest
32	Aquacultural farm	Over 200 ha	Rest
33	Port	Over 100,000 T	Rest
34	Ply-wood factory	Over 500,000 m <sup>2</sup> /year	Rest
35	Migration area	Over 500 households	Rest
36	Alluvial plain	Over 50,000 T/year	Rest
37	Engineering factory	Radar station and central broadcasting station	Rest
38	Telecommunication stations	Large and medium scale	Small
39	Freezing plant	Large and medium scale	Small
40	Construction materials factory	Large and medium scale	Small
41	Hotel and business sector	Large and medium scale	Small

# B. Forest animals:

	Vietnamese name	Scientific name	Note
	2	3	4
1	Tê giác 1 sừng	Rhinoceros sondaicus	
2	Bò tót	Bos gaurus	
3	Bò xám	Bos sauveli	
4	Bò rừng	Bos banglang	
5	Trâu rừng	Bubalus bubalis	
6	Voi	Elephas maximus	
7	Cà tong	Cervus eldi	
8	Hươu vàng	Cervus porcinus	
9	Hươu sà	Moschus moschiferus	
10	Hổ	Panthera tigris	
11	Báo hoa mai	Panthera pardus	
12	Báo gấm	Neofelis nebulosa	
13	Gấu chó	Helarctos malayanus	
14	Vọc xám	Trachypithecus phayrei	
15	Vọc mũi hếch	Rhinopithecus avunculus	
16	Vọc ngũ sắc	Pygathrix nemacus	
	- Vọc ngũ sắc Trung Bộ		
17	- Vọc Nam Bộ	Pygathrix nigripes	
	Vọc đen:		
	- Vọc đen má trắng	Presbytis francoisi francoisi	
	- Vọc đầu trắng	Presbytis francoisi	
	- Vọc mõng trắng	Presbytis francoisi delacouri	
	- Vọc Hà Tĩnh	Presbytis francoisi hainensis	
	- Vọc đen Tây Bắc	Presbytis francoisi ap	
18	Vượn đen:		
	- Vượn đen	Hylodactylus concolor	
	- Vượn đen má trắng	Hylodactylus concolor leucogenis	

19	- Vượn tay trắng	Hylodactylus lar
20	- Vượn đen má trắng	Hylodactylus concolor
21	Nam Bộ	gabrielae
22	Chồn mực	Arctictis binlurong
23	Cầy vằn	Chrotogale owstoni
24	Chồn dơi	Priorodon pardicolor
25	Cầy vàng	Galeopithecus temminski
	Củ li lửa	Martes flavigula
	Sóc bay:	Nycticebus pigmaeus
	- Sóc bay sao	Peraurista elegans
	- Sóc bay trâu	Peraurista lylei
26	Sóc bay:	
	- Sóc bay nhỏ	Belomys
	- Sóc bay lông tai	Belomys pearsoni
27	Sói Tây Nguyên	Canis aureus
28	Công	Pavo muticus imperator
29	Gà lôi:	
	- Gà lôi	Lophura diardi diardi
	- Gà lôi lam mào đen	Lophura imperialis Delacori
	- Gà lôi lam mào trắng	Lophura diardi Bonopartit
30	Gà tiền:	
	- Gà tiền	Polyplectron bicalcaratum
	- Gà tiền mặt đỏ	Polyplectron germaini
31	Trĩ sao	Rhinoceros ocellata
32	Sếu có trụ	Grus antigone
33	Cá sấu nước lợ	Crocodylus porosus
34	Cá sấu nước ngọt	Crocodylus siamensis
35	Hổ mang chúa	Ophiogus hainan
36	Cá cóc lam đảo	Paramesotriton deloustan

GROUP II:

II. Forest plants:

	Vietnamese name	Scientific name	Note
1	2	3	4
1	Cẩm lai - Cẩm lai Bà Rịa - Cẩm lai - Cẩm lai Đồng Nai Gà te (Gỗ đỏ)	Dalbergia oliverii Gamble Dalbergia bariacensis Dalbergia oliverii Gamble Dalbergia dongnaiensis Afzelia xylocarpa	
2	Gụ	Sindorn cochinchinensis	Gỗ mặt
3	- Gụ mặt - Gụ lau	Sindorn tokinensis - A Chev	Gỗ lau
4	Giáng hương - Giáng hương - Giáng hương Cambốt	Pterocarpus pedatus Pierre Pterocarpus cambodianus Pierre	
5	- Giáng hương mặt chim Lát - Lát hoa - Lát da đồng - Lát chun	Pterocarpus indicus Willd Chukrasia tabularis Ajust Chukrasia sp. Chukrasia sp	
6	Trắc - Trắc - Trắc dày - Trắc Cambốt Pơ mu	Dalbergia cochinchinensis Pierre Dalbergia ananensis Dalbergia combodiana Pierre Fokienia hodginsii A. Henry at Thomas	
7			
8	Mun - Mun - Mun sọc Đinh	Diospyros mun H.lee Diospyros sp Markhamia pierre Madhuca pasquieri	
9	Sến mặt	Burretiodendron hiscanu	
10	Nghiến	Erythrophloeum fordii	
11			
12	Lim xanh		

13	Kim giao	Padocarpus fleuryi	
14	Ba gac	Rauwolfia verticillata	
15	Ba kích	Morinda officinalis	
16	Bách hợp	Lilium brownii	
17	Sâm Ngọc Linh	Panax vietnamensis	
18	Sa nhân	Amonum longiligulare	
19	Thảo quả	Amonum tsoko	

## Appendix IV

### EMISSION STANDARD FOR ALL VEHICLE EMISSION STANDARD FOR NEW VEHICLE

- 1- Gasoline vehicle should follow standard A
- 2- Diesel vehicle should follow standard B. Limitation of emission is 15 Hartbridge with free acceleration when diesel engine runs at stable speed.

#### EMISSION STANDARD A AND B

Reference weight (RW)	A			B		
	CO	HC	NOx	CO	HC	+ NOx
RW < 750	65	6.0	8.5	58		19
750 < RW < 850	71	6.3	8.5			
850 < RW < 1020	76	6.5	8.5			
1020 < RW < 1250	87	7.1	10.2	67		20.5
1250 < RW < 1470	99	7.6	11.9	76		22
1470 < RW < 1700	110	8.1	12.3	84		23.5
1700 < RW < 1930	121	8.6	12.8	93		25
1930 < RW < 2150	132	9.1	13.2	101		26.5
2150 < RW	143	9.6	13.6	110		28

In this table:

- Reference weight: Reference weight of empty vehicle - 100 kg

- CO: Carbon monoxide

- HC: Hydrocarbon

- NOx: Oxide Nitrogen

All is value in g/l in test

3 - All kinds of cars and motorbikes should observe regulations on emission as follows:

- Hydrocarbon: less than 5.0 g/km

- Monoxide Carbon: less than 12.0 g/km

**Note:**

Standards A and B are determined in accordance with the standards given by the UN Economic Commission for European Standard

(Emission standard 15.03 and 15.04).

List of precious forest plant and animals

(Issued with Decree No. 18 / HDBT dated January 17, 1992 of the Council of Ministers)

## Appendix V.1

### PERMITTED VIBRATION

Acceleration of vibration of the whole body should not exceed:

Category	Permitted acceleration		Permitted line.
	Vertical vibration	Horizontal vibration	
Category I	0.540	0.380	—
Category II	0.270	0.190	—
Category III	0.081	0.057	0.066
Category IV	0.054	0.038	0.045

**Note:**

- Category I: Vibration affects driver's seat in vehicles that often operate in bad road for example: lorry, agricultural tractor, construction machine ...

- Category II: Vibration affects driver's seat differently from Category I

- Category III: Vibration in industrial workshop, in surrounding areas, 15 meters from the main traffic ways.

- Category IV: Vibration in areas different from areas in Category III.

## Appendix V.2 VIBRATION IN EACH OCTA

Octa (Hz)	Permitted acceleration (m/s <sup>2</sup> )		Permitted speed (m/s <sup>2</sup> )	
	Horizontal vibration	Vertical vibration	Vertical vibration	Horizontal vibration
1(0.7-1.4)	1.10	0.39	20.10(-2)	6.3.10(-2)
2(1.4-2.8)	0.79	0.42	7.1.10(-2)	3.6.10(-2)
4(2.8-5.6)	0.57	0.80	2.5.10(-2)	3.2.10(-2)
8(5.6-11.2)	0.60	1.62	1.3.10(-2)	3.2.10(-2)
16(11.2-22.4)	1.14	3.20	1.1.10(-2)	3.2.10(-2)
31.5(22.4-43)	2.26	6.38	1.1.10(-2)	3.2.10(-2)
63(43-90)	4.49	12.76	1.1.10(-2)	3.2.10(-2)

## Appendix V.3 NOISE STANDARD FOR VEHICLE

Kind of Vehicle	Permitted noise	
	New vehicle	Old vehicle
2-wheel vehicle, engine under 125 cc	79 (d BA)	92
2-wheel vehicle, engine over 125 cc and 3-wheel motor vehicle	83	92
Tourist car under 12 seats	83	92
Light - lorry	84	92
Lorry and bus under 10,000 cc	87	92
Lorry and bus over 10,000 cc	89	92

## Appendix V.4 NOISE STANDARD IN AREAS (UNIT DBA)

Areas	6 a.m. to 6 p.m.	6 p.m. to 10 p.m.	10 p.m. to 6 a.m.
Category I	55	50	45
Category II	65	60	50
Category III	70	65	55
Category IV	75	70	60
Category V	80	75	65

### Note:

Category I: Areas that need quietness such as hospitals, kindergartens, schools, libraries, research institutes.  
 Category II: Residential areas, hotels, offices  
 Category III: Business areas, surrounding areas 15 meters from the main traffic roads, markets, stations and bus stop.  
 Category IV: Handicraft and light industry manufacturing area  
 Category V: Heavy industry manufacturing area case noise (background noise) in the area when the vehicle does not operate, higher than the standard mentioned in the table above, the vehicle should not make the noise increase more than 5DBA from the original noise level.