

# FINAL REPORT

## Volume One

*Integrated Methodology  
for Review of EIA (IMREIA)*

**Review and Analysis of the  
EIA Process in Jamaica**

Submitted to

**Centro de Estudios para el Desarrollo**  
Nueva de Lyon 0128,  
Providencia, Santiago  
Chile

Prepared by

**Peter Reeson**  
Environmental Solutions Ltd.  
20 West Kings House Road  
Kingston 10  
Jamaica

**MAY 2000**

---

**TABLE OF CONTENTS**

TABLE OF CONTENTS .....i

1. INTRODUCTION ..... 1

    2.1 1.1 Purpose..... 1

    2.2 1.3 Environmental Legislation..... 3

    2.3 1.4 Previous reviews of Jamaican EIA process..... 4

2. APPLICATION OF MIREIA ..... 6

3. ANNEXES ..... 6

    2.4 3.1 Annex 1 - Legal and Procedural Framework ..... 6

    2.5 3.2 Annex 2 – Application and Performance of EIA System..... 10

    2.6 3.3 Annex 3 - Perceptions of EIA System\* ..... 12

    2.7 3.4 Annex 4 - EIA Report Evaluation..... 12

4. EIS SYSTEM – ISSUES, CONCLUSIONS AND RECOMMENDATIONS ..... 14

5. OVERALL RECOMMENDATIONS ..... 17

6. APPENDICES.....

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank

\*This section was omitted from this document because it contains confidential information

---

## 1. INTRODUCTION

### 1.1 Purpose

This document presents the results of a review and analysis of the process of environmental impact assessment (EIA) as currently carried out in Jamaica using the Integrated Methodology for the Review of EIA. The document was prepared by Peter Reeson, Principal Consultant, Environmental Solutions Ltd. on behalf of the Centro de Estudios para el Desarrollo (CED) based in Chile. It contributes to a larger study of the EIA process as practiced in ten selected countries of Latin America and the Caribbean, a project funded by the Inter-American Development Bank (IDB).

The purpose of the overall exercise is to identify any weaknesses and constraints in the conduct of EIA in the region and to recommend how these may best be addressed and improved through IDB intervention and assistance. The underlying premise is that the EIA process should follow the general steps and standards as practiced in those countries where the process has been well developed and established. The steps in a standardised EIA process are shown at Figure 1. The major benefits of such a process are stated in the CED methodology document as being:

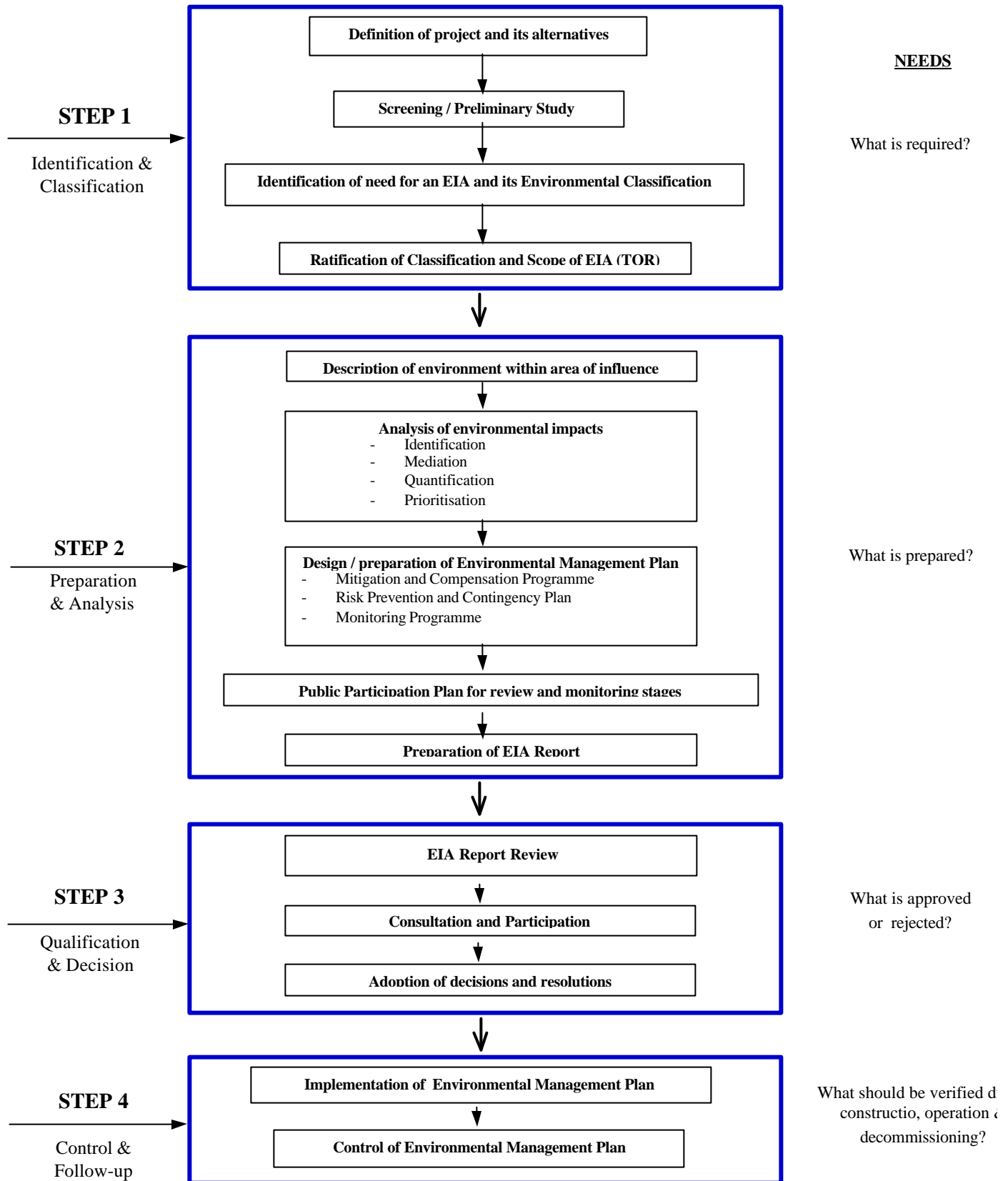
- a) The systematic incorporation of environmental considerations in planning and decision-making;
- b) A coherent application of environmental policies;
- c) The systematic incorporation of public opinion; and
- d) The promotion of best practices.

### 1.2 Background

Jamaica is a small tropical island state with an area of 11,420km<sup>2</sup>. located roughly in the middle of the Caribbean Sea. It is mountainous (Blue Mountain Peak = 2,300m) and surrounded by a very narrow coastal plain which is at its widest (18km) on its southern side. The geology of the island is comprised mainly of faulted limestones, with other sedimentary rocks and volcanics occurring. By virtue of its topography and high relief, the island has many vegetation types and ecological habitats ranging from high elphin mist forest to coastal mangrove swamps. It is correspondingly diverse ecologically with a high level of endemism.

Jamaica has a population of approximately 2.5 million people, characterised by a wide disparity in income levels and distribution of wealth. The island's economy is based on bauxite/alumina production, tourism, agriculture, small manufacturing and informal commercial activities. Politically, the country is independent with a democratic system based on the British Westminster model. Jamaica is divided into 13 parishes, each with a capital and responsible for government administration at the local level.

**FIGURE 1. A STANDARDISED PROCESS FOR ENVIRONMENTAL IMPACT ASSESSMENT.**



### 1.3 Environmental Legislation

A fragile ecosystem, Jamaica faces many environmental issues including deforestation, coastal water pollution, urban waste disposal and poverty. In attempting to address these issues the Government of Jamaica (GOJ) established the Natural Resources Conservation Department in 1974, following the 1972 UN Stockholm Conference. This agency, responsible for the protection and management of the island's environment, was later made into an executive agency with the passage into law of the **Natural Resources Conservation Authority Act (1991)**. Under the new law the entire island was been declared as a prescribed area and an environmental permit and licencing system was established to promote sustainable development and to control pollution.

Under Section 9 of the NRCA Act '*...no person shall undertake in a prescribed area any enterprise, construction or development of a prescribed description or category except under and in accordance with a permit issued by the Authority.*' Under Section 10, a project proponent is required '*...where it [NRCA] is of the opinion that the activities of such enterprise, construction or development are having or likely to have an adverse effect on the environment, to submit to the Authority in respect of the enterprise, construction or development, an environmental impact assessment containing such information as may be prescribed,...*' The requirement for an EIA is not only limited to the activities on the prescribed list and the NRCA may request an EIA in other instances where it sees fit as under Section 10, Subsection 4 of the NRCA Act... '*Any person who, not being an applicant for a permit, refuses or fails to submit an environmental impact assessment as required by the Authority shall be guilty of an offence...*'

The list of prescribed activities was specified in the **Natural Resources (Prescribed Areas) (Prohibition of Categories of Enterprise, Construction and Development) Order, 1996** that took effect from 1 January 1997. The list of these activities is shown in Appendix 1. The requirement for development permits and licences to discharge effluents was enabled by the **Natural Resources Conservation (Permits and Licences) Regulations, 1996**. These also came into effect as of 1 January 1997.

Many other Jamaican laws refer to environmental matters, the main ones being:

- Wildlife Protection Act;
- Beach Control Act;
- Watersheds Protection Act;
- Fisheries Act;
- Town & Country Planning Act;
- Public Health (Air, Soil and Water Regulations) Act; and
- Litter Act

Jamaica is signatory to several international treaties related to environmental issues, including:

- 
- Montreal Protocol on Ozone Depleting Substances (+ Amendments)
  - Ramsar Convention
  - UN Framework Convention on Climate Change
  - Convention on Biological Diversity
  - CITES Convention
  - International Convention on the prevention of Pollution from Ships
  - United Nations Convention on the Law of the Sea
  - Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region
  - Convention concerning the Protection of the World Cultural and Natural Heritage

#### 1.4 Previous reviews of Jamaican EIA process

An analysis of the EIA process in Jamaica was first carried out in 1997<sup>1</sup>. This was based on interviews with persons involved with the process and an evaluation of the EIA reports that had been submitted to the NRCA since 1992. The analysis was based on a methodology proposed by Lee & Colley, 1992<sup>2</sup>. The author concluded that the overall average quality rating (A – F) of the 16 reports reviewed was a D but noted that there had been a gradual improvement in their quality over time. The author identified, *inter alia*, the following shortcomings in the reports:

- No estimation of time frames for each stage of development;
- Effects of project decommissioning not considered;
- Quantitative analyses and estimations of impact predictions rarely used;
- Analyses of alternatives rarely used and weak;
- Weak use of figures, graphics and maps;
- Poor use of tables and graphs;
- Reports not written in non-technical language;
- Lengthy executive summaries;
- Methods of impact assessment and evaluation not provided;
- Impact levels poorly justified;
- Poor public consultation;
- Estimates of effluent discharges not explained properly;
- Socio-economic discussions irrelevant and/or too generalised;
- Impact mitigation measures were too generic and imprecisely expressed; and
- Provision of irrelevant scientific information.

More recently, a review of the Jamaican EIA process was carried out as part of the 1994 – 2004 Environmental Action Programme (ENACT), a joint

---

<sup>1</sup> Karen L. McDonald, 1997. *A critical review of the environmental impact assessment process in Jamaica*. M.Sc. thesis. Univ. of East Anglia.

<sup>2</sup> Lee, N. & R. Colley, 1992. *Reviewing the quality of environmental statements*. Occas. Pap. 24, EIA Centre, Dept. of Planning & Landscape, Univ. of Manchester.

Government of Jamaica and Government of Canada programme for environmental capacity building. That report (ENACT Project 3110-029), prepared in mid 1999, identified the following weaknesses in the EIA process:

- Absence of a centralised EIA administration and coordinating function;
- Lack of clear standards and documentation required for EIA preparation;
- Vague terms of reference used for EIA reports;
- Improper/incomplete filling out of PIF (screening);
- PIF did not provide specific guidance for identification of significant effects;
- Poor scoping and streamlining (categorisation) of EIA;
- Lack of mandatory public consultation;
- Public consultations applied too late in EIA process;
- Poor specification of impact mitigation measures; and
- Poor specification of environmental management plans.

For the short-term the ENACT report recommended that:

- All of the relevant government instruments used in EIA reviews must be codified and the lead agencies for administering these instruments must be clarified (a draft scoping matrix was presented by the consultant);
- The NRCA and its external review agency partners must commit themselves to a 90 day EIA review and decision-making process;
- Mandatory public notices should occur twice for all projects subject to EIA (during scoping and during the later EIA report review stage);
- The NRCA should require Environmental Management Plans as a standard EIA documentation requirement; and
- The NRCA should establish the Permit and Licence (P&L) Secretariat, as planned, to administer and coordinate EIAs.

Over the long-term, that report recommended:

- The categorisation of projects during the screening process;
- Removal from consideration of those aspects of review already dealt with by other regulatory agencies so as to avoid duplication and to save time; and
- Improved application of master planning to facilitate the determination of cumulative impacts.

A P&L Secretariat had long been mooted by the NRCA and this has now been established. At the same time, the agency revised its permitting and licencing application process. This is discussed below in Section 3.1. The main improvement made so far has been to introduce formal public notification at the outset of the EIA process.

It is also relevant to point out here that the ENACT report noted a genuine interest among the external review agencies, the NGO sector and the private sector consulting firms to assist in the improvement of the EIA process.

## **2. APPLICATION OF IMREIA**

Application of the EIA process review methodology used in this study followed the instructions given in the CED document entitled ‘Descripcion de la Metodologia Integrada para le Revision de Impacto Ambiental’. Annexes 2 & 3 of this document, originally provided in Spanish, were translated into English so that they could be understood and used by the relevant persons in Jamaica.

Essentially, the methodology is comprised of three phases; diagnosis, conclusions, and recommendations. The diagnostic phase is made up of four levels of analysis and these consider:

- Legal and procedural framework for EIA;
- Application of EIA;
- Perceptions of the EIA process; and
- Sustainability.

Each of these levels is assessed by responses to a series of questions contained on the respective form (annexes) provided by CED. The questionnaire related to perceptions of the process (Annex 3) was applied to a number of persons involved in one way or the other with the EIA process, and that for sustainability (Annex 4) required the review of EIA reports of approved projects, available at the NRCA Documentation Centre.

## **3. ANNEXES**

### **3.1 Annex 1 - Legal and Procedural Framework**

The Annex 1 form was completed, shown at Appendix 2, following a meeting with Mr. Learie Miller, Deputy Director, NRCA, and a review of the documents listed below:

- Natural Resources Conservation Authority Act of 1991;
- NRCAA Natural Resources Conservation (Permits and Licences) Regulations, 1996;
- NRCAA Natural Resources (Prescribed Areas) (Prohibition of Categories of Enterprise, Construction and Development) Order, 1996;
- Jamaica National Environmental Action Plan, 1998 Status Report (JANEAP 1998)
- NRCA Mission Statement; and
  - NRCA Guidelines for conducting environmental impacts assessments.

Jamaica does not have an official and explicit statement of environmental policy although it is implied in the JANEAP 1998 Status Report and by the NRCA Mission Statement. The relevant paragraphs of the Introduction chapter to the JANEAP 1998 Status Report and the NRCA Mission Statement are given at Appendices 3 and 4 respectively.

The NRCA Act designates the whole island as a Prescribed Area, meaning that it applies to all parts of the island. It regulates any activity listed in the prescribed list of enterprises, construction activities and development activities in the Order and for which all the necessary statutory or planning approvals had not been granted prior to January 1, 1997. A permit from the NRCA is required to undertake any prescribed activity or project and the issue of a permit may require, beforehand, an environmental impact assessment of the activity. Where the Authority has refused a permit for an activity, the applicant has the right to appeal to the Minister responsible for the environment.

The NRCA Act also binds the Crown, which means that activities undertaken by other Government agencies are also required to comply with this law. Furthermore, the Town and Country Planning Act (the physical planning legislation) has also been amended so that Authority cannot grant approval for any development unless first approved by the NRCA. The same applies to the Parish Councils who review development applications at the level of local government.

There are no regulations specifying the structure and content of an environmental impact assessment in Jamaica but the NRCA has issued guidelines for their content, conduct and preparation. The process for EIA and the content of an EIA report as presented in the guidelines are given below at Tables 1 and 2. The process requires that the Terms of Reference (TOR) for the EIA must be submitted to the NRCA for review and approval before commencement of the study. Also, during the later EIA review process, the agency does request additional information from the project proponent where it is deficient in the EIA report. In terms of public participation, formal public notification of an impending EIA is now required during the preparation of the TOR.

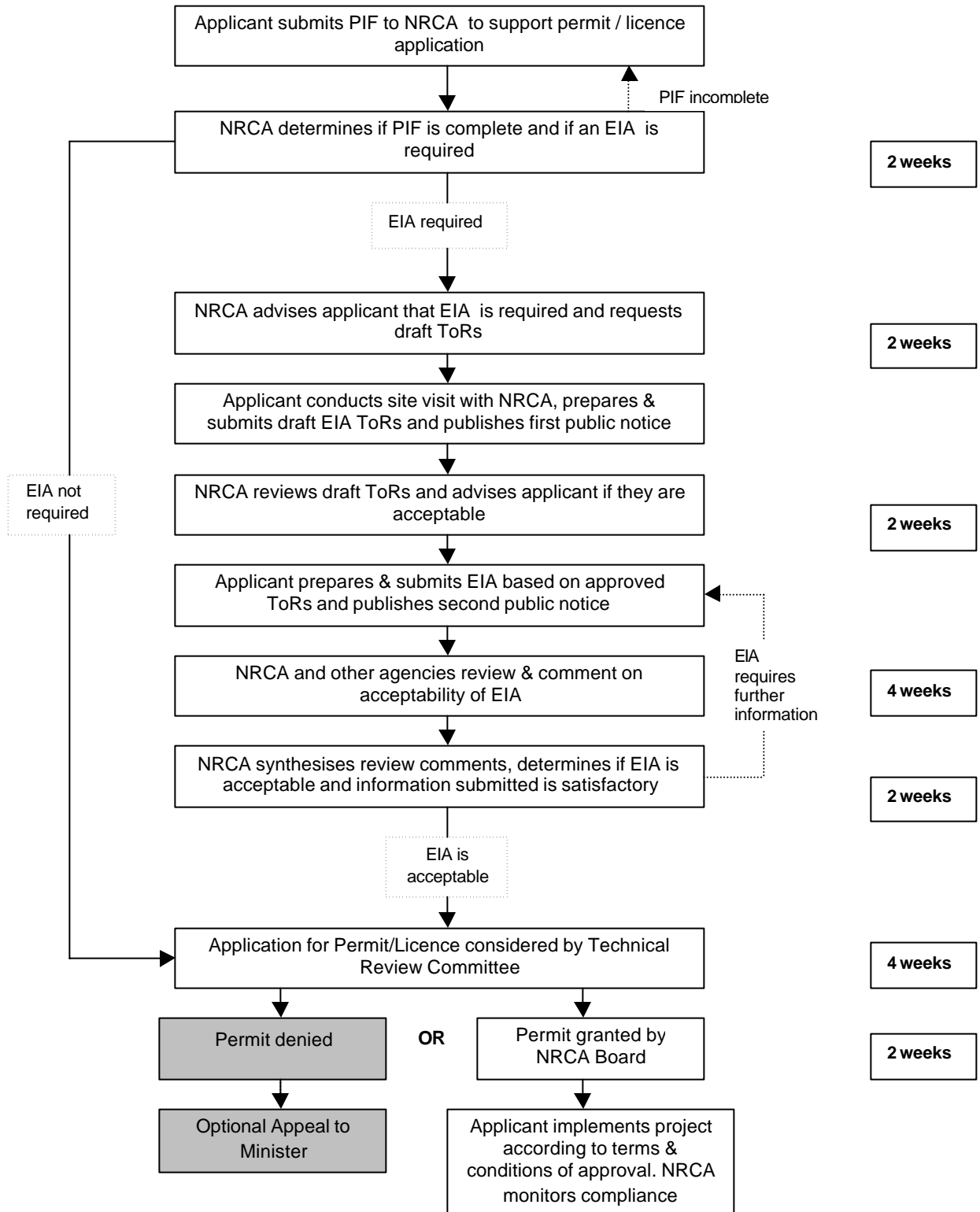
The flow chart for the EIA process in Jamaica is shown at Figure 2. A project proponent wishing to carry out a type of development that is included on the prescribed list of development activities is required to apply to the NRCA for a permit to do so. This is done by means of a Permit Application supplemented by a completed Project Information Form (PIF). The PIF seeks basic information on the project and its location and is the project screening document used by the NRCA to determine whether or not an EIA of the proposed project is necessary. Additionally, an internal impact scoping document is used to rate the importance of the potential impacts. This screening step may also include a reconnaissance visit to the site by the NRCA.

Based on its review of the PIF, the Authority then advises the applicant whether or not an EIA is required, and if so, requests the draft Term of Reference for the EIA. The project proponent is now required to issue public notices of his/her

<b>TABLE 1. STEPS IN EIA PROCESS AS CONTAINED IN NRCA GUIDELINES.</b>
1. Preliminary activities including scoping or setting terms of reference for the EIA, selecting consultant to do the EIA, and review of existing legislation.
2. Submission of Draft Terms of Reference to the NRCA for approval.
3. Conducting the EIA study. <ul style="list-style-type: none"> <li>• Collecting background data and information</li> <li>• Public involvement</li> <li>• Identifying impacts in terms of magnitude and significance</li> <li>• Socio-economic analysis of project effects / impact</li> <li>• Recommending mitigation action for each impact identified</li> <li>• Analysis of alternatives of the project – both economic and environmental</li> <li>• Training requirements of the project</li> <li>• Development of a monitoring programme plan</li> </ul>
4. Documenting the study in the EIA report.

<b>TABLE 2. STRUCTURE OF EIA REPORT AS CONTAINED IN NRCA GUIDELINES.</b>
Executive Summary
Introduction
Policy, Legal and Administrative Framework
Description of the Environment
Description of Proposed Project in detail
Significant Environmental impacts
Socio-economic Analysis of Project Impacts
Identification and Analysis of Alternatives
Mitigation Action / Mitigation Management Plan
Environmental Management and Training
Monitoring Programme
Public Involvement
List of References
Appendices including: <ul style="list-style-type: none"> <li>• Reference documents, photographs, unpublished data</li> <li>• Terms of Reference</li> <li>• Composition of the consulting team</li> <li>• Notes of public consultations</li> </ul>

**FIGURE 2. NRCA PERMIT AND LICENCE APPLICATIONS PROCESS**



intentions and any relevant concerns expressed by the public are now to be included in the TOR. Once the TOR have been reviewed, and amended where necessary, they are approved and the applicant is instructed to proceed with the preparation of the EIA. In Jamaica, an environmental consultant or consulting firm retained by the applicant normally carries out the EIA and prepares the EIA report.

On completion and submission of the EIA report, a review of the document is carried out first by the relevant technical unit of the NRCA (e.g. Coastal Zone Management, Wildlife Protection, etc.). If necessary, supplementary information is requested from the developer or the EIA consultant at this stage. Depending on the type of project, any of several other government agencies may also be involved in the EIA report review. These include the Town and Country Planning Department, the Water Resources Authority, the Environmental Control Division (Ministry of Health), the Office of Disaster Preparedness and Emergency Management, the Mines and Quarries Division, the Fisheries Division and the Forestry Department. The findings and recommendations of the unit responsible for the review are then passed to a Technical Review Committee for final consideration. From there, the application is passed to the NRCA Board for final approval/disapproval of the permit. The permits include the conditions for approval and identify the specific measures with which the developer must comply.

The responsibility for monitoring implementation of the impact mitigation measures and compliance with the conditions stipulated in the permit is the responsibility of both the relevant technical division and the Regulatory and Compliance Unit. The unit is assisted in this regard by environmental wardens appointed in each parish.

### **3.2 Annex 2 – Application and Performance of EIA System**

Annex 2, provided at Appendix 5, was completed with the collaboration of Miss Frances Blair, <sup>i/c</sup> NRCA Permit and Licence Secretariat and with reference to the Secretariat's EIA database. Consultations were also held with Mr. Anthony McKenzie, Director, Coastal Zone Management Unit and Mr. Errol Morris, Watersheds Unit.

The NRCA instituted a P&L Secretariat in the latter half of 1999 to coordinate the EIA review process and to provide liaison with Permit applicants. The Secretariat is currently in the process of compiling a database. This will provide a record of all the EIA reports submitted for review since 1997 and the status of their progress in the review process. The information recorded on the database is listed in Table 3.

1.	Project Name (activity / location)
2.	Project Proponent
3.	Parish
4.	Date PIF Received
5.	Lead Branch (technical section responsible for review)
6.	Date of response to Proponent (re PIF review)
7.	Requirement for EIA (yes/no)
8.	Date of receipt of Draft TOR
9.	Date of response to Proponent (re TOR)
10.	Date of receipt of EIA
11.	Date of response to Proponent (re EIA)
12.	Date Addendum received (if applicable)
13.	Date of response to Proponent (re addendum)
14.	Submission of review to Technical Review Committee (TRC)
15.	Recommendation by TRC (yes/no)
16.	Date recommendation submitted to Authority
17.	Date project approved/denied by Authority
18.	Date of 1 <sup>st</sup> draft Permit (for internal legal review)
19.	Date draft Permit approved by legal department
20.	Date Permit prepared
21.	Date Proponent notified
22.	Date Permit collected
23.	Project Status (current, approved, denied, inactive (>6 months))

The PIF is used by the NRCA to determine whether or not the project needs an EIA but this screening process does not formally distinguish between those projects that need a full and comprehensive EIA, or any other, from those that only need a partial treatment. However, this distinction tends to be made at the next stage when the TOR are scoped and reviewed to ensure that the appropriate issues are covered. The NRCA uses a prepared set of criteria for scoping projects. With respect to the categorisation of projects, it may be noted that reference is increasingly being made, in environmental circles, to the conduct of a preliminary or partial EIA as opposed to a full EIA. The use of Strategic EIAs is also becoming widely used in Jamaica during the design phase of large projects.

Until last year, no formal guidelines or review methods and procedures had been established by the NRCA for internal EIA document review and this had been left largely to the experience and discretion of the technical officers. Since then, the NRCA has adopted a draft matrix for the scoping the relevant issues in EIAs. This identifies the applicable national standard or policy, how the issue should be addressed and what the appropriate mitigation measures may include. It is expected that this matrix will be further elaborated upon.

To date very few projects have been refused outright by the NRCA once satisfactory mitigation measures have been identified. However, the general perception outside of the agency is that monitoring for implementation of those

mitigation measures is poor, particularly with respect to the conditions of the Permit.

### **3.3 Annex 3 - Perceptions of EIA System**

The Annex 3 sheet (translated into English) was shown to 15 persons representing the following categories of involvement in the EIA process:

- Project Developers
- Environmental agencies
- Public development agencies
- Environmental consultants
- Non-governmental organisations
- Universities
- Environmental spokespersons

A detailed list of the persons invited to participate is given in Appendix 6 along with a copy of the covering letter accompanying the Annex. The English version of the Annex is provided at Appendix 7 to allow CED to verify that the intended meaning of the questions posed was correct. The returns from the 13 persons who responded and/or were interviewed are inserted at Appendix 8 and a summary of all the responses is given at Appendix 9.

Note is made here of three points. First, that several of the responses in Section 1 (General Vision of the System) indicated a fairly even distribution (inconclusive?) of ratings owing to how the question was interpreted (e.g. 1.4, 1.5, 1.6, 1.8, 1.9, & 1.10). On the one hand, the responses reflected perceptions of overall environmental management in Jamaica and, on the other, the actual contribution to that made by the application of EIA. Second, reference to the term ‘categories’ used by CED in the annex was interpreted to mean the categorisation of projects at the project screening stage. As noted above, the NRCA does not currently distinguish projects according to the type of EIA required. Third, the term ‘minimum contents’ was assumed to mean the minimum requirements for information to be presented in the EIA. This term is not used in the Jamaican EIA lexicon. In Jamaica, the approved TOR for the EIA would define its scope and contents.

*Parts of this section were omitted from this document for containing confidential information.*

### **Annex 4 - Evaluation of EIA Reports**

This activity was initiated by reviewing the list of EIA projects that had been approved by the NRCA in order to determine the different types and relative numbers of EIAs carried out in Jamaica. A representative selection of projects was made from this list for evaluation of the respective EIA reports using the

Annex 4 format. Thirteen documents were selected and these were reviewed at the NRCA Documentation Centre. Miss Yolanda Mittoo, Librarian, facilitated the reading of the documents. These projects were:

- a) Sub-divisions/Housing Developments
  - 1) Angel's Pen
  - 2) Bellevue Lands
  - 3) Longwood Estates
  - 4) Sheckles Pen
  
- b) Hotel/Resorts
  - 5) Raffles New Age Resort
  - 6) Ritz Carlton Golf Course
  - 7) Sea Splash EIA
  - 8) RIU Hotel Development, Bloody Bay
  
- c) Agri-/Aquaculture/Watersheds
  - 9) Caribbean Mariculture Products Ltd.
  - 10) Eastern Banana Estates (river training)
  
- d) Roads
  - 11) Old Harbour Bypass
  
- f) Industrial
  - 12) Jamaica Broilers Co-generation
  - 13) Rugby Lime

All the selected EIA reports were carried out by local consultants, except in one case when an international firm was used. That firm engaged local technical expertise.

The rating sheets for each of the above EIA documents are provided at Appendix 10 and a summary of the results is given at Appendix 11. With respect to Question 1.8, it should be noted that only the original EIA documents were reviewed and that any amendments made to the reports resulting from the NRCA review process were not available in the library. Amendments apparently are kept in the project files. This question was therefore marked NA (not applicable) in all cases.

Twelve of the thirteen EIA reports reviewed were rated as bad and the thirteenth was rated as average (regular). This partly reflects the very strict criteria for rating the documents required by CED (a single 'deficient' mark in any of the three rating categories can reduce an otherwise good EIA report to one classified as bad) and the use of only three rating criteria (good, average and bad). These results roughly conform to the overall rating of 'D' given to Jamaican EIA reports by Karen McDonald (see Section 1.4) using seven rating categories (A-F).

Interestingly, the single EIA carried out by the international firm referred to was also rated as bad.

#### 4. EIS SYSTEM – ISSUES, CONCLUSIONS AND RECOMMENDATIONS

The CED format was used for presenting the identified weaknesses in the Jamaican EIA system and the conclusions and recommendations of this review. These findings are given in the Table 4 below.

**TABLE 4. ISSUES, CONCLUSIONS AND RECOMMENDATIONS FOR EIA PROCESS IN JAMAICA.**

Evaluación Ambiental	Productos		
	Principales Resultados (Debilidades / Oportunidades)	Conclusiones	Recomendaciones

<b>Características del Proceso</b>	<ul style="list-style-type: none"> <li>Public perception that EIA represents increase in bureaucatisation of development approval process.</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient public understanding of purpose/value of EIA process.</li> </ul>	<ul style="list-style-type: none"> <li>Promulgate specific environmental policy which incorporates purpose of EIA.</li> <li>Promote EIA process via public education.</li> </ul>
	<ul style="list-style-type: none"> <li>Reluctance of project proponents to pay full costs for thorough EIA study.</li> </ul>	<ul style="list-style-type: none"> <li>Content of EIA diminished in some cases to meet budget allocation.</li> </ul>	<ul style="list-style-type: none"> <li>Better dissemination of NRCA policy guidelines and EIA requirements.</li> </ul>
	<ul style="list-style-type: none"> <li>Excessively long review process.</li> </ul>	<ul style="list-style-type: none"> <li><b>NRCA</b> – Inefficient review procedure. Improvement expected with new review matrix &amp; establishment of P&amp;L Secretariat.</li> </ul>	<ul style="list-style-type: none"> <li>Implement Somer's report recommendations.</li> <li>Regular and high level institutional review of status of projects</li> <li>Involve all players in improvement of EIA system.</li> </ul>
		<ul style="list-style-type: none"> <li><b>Consultants</b> – Amendments and repeated reviews due to inadequately prepared EIAs.</li> </ul>	<ul style="list-style-type: none"> <li>Provide more EIA training opportunities.</li> <li>Require / promote professional EIA certification</li> <li>Involve all players in improvement of EIA system.</li> </ul>
<ul style="list-style-type: none"> <li>Poor monitoring of projects (perceived – confirmatory data not readily available).</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient monitoring, particularly during construction phase.</li> </ul>	<ul style="list-style-type: none"> <li>Better specification of monitoring plans in EIA.</li> <li>Delegation of monitoring responsibilities.</li> <li>Improved focus / resources devoted to monitoring mitigation measures / permit conditionalities<sup>3</sup>.</li> <li>Incorporate monitoring events in P&amp;L Secretariat data base.</li> <li>Regular and high level institutional review of status of projects and monitoring.</li> </ul>	
<ul style="list-style-type: none"> <li>Insufficient public review prior to EIA completion.</li> </ul>	<ul style="list-style-type: none"> <li>Improvement expected under revised EIA process.</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with new requirement for public notification at TOR and EIA completion stages.</li> <li>Regular and high level institutional review of status of projects and public consultation.</li> </ul>	

<sup>3</sup> This would have the added benefit of making persons aware of the importance of compliance and improve image of NRCA in managing the environment.

<b>Características del Sistema</b>	<ul style="list-style-type: none"> <li>Absence of simple categorisation of projects requiring EIA.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate categorisation of projects should improve public understanding / acceptance of system and assist project scoping.</li> </ul>	<ul style="list-style-type: none"> <li>Develop appropriate screening criteria to distinguish partial, full and strategic EIAs.</li> <li>Standardise/codify TOR for EIA of common types of projects.</li> </ul>
	<ul style="list-style-type: none"> <li>Incompletely prepared EIAs.</li> </ul>	<ul style="list-style-type: none"> <li>EIA being carried out by insufficiently qualified practitioners.</li> </ul>	<ul style="list-style-type: none"> <li>Certification of EIA practitioners.</li> <li>Establish minimum criteria for analysis / description of relevant environmental parameters.</li> </ul>
		<ul style="list-style-type: none"> <li>Lack of ecological background data.</li> </ul>	<ul style="list-style-type: none"> <li>Establish national environmental information data base.</li> <li>Improve availability of NRCA database (e.g. Coastal Areas Atlas)</li> <li>Reactivate data collection and compilation at Conservation Data Centre.</li> <li>Clarification / promulgation of internal review process and criteria.</li> <li>Better dissemination of NRCA policy guidelines.</li> </ul>
		<ul style="list-style-type: none"> <li>Lack of trained technical field personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Define and establish environmental field training for technical personnel (e.g. University of Technology).</li> </ul>
<b>Características de los informes ambientales</b>	<ul style="list-style-type: none"> <li>Lack of conformance with NRCA EIA requirements                             <ul style="list-style-type: none"> <li>Insufficient detailing of construction phase activities.</li> <li>Weak treatment of project alternatives.</li> <li>Insufficient detailing / quantification of Impacts.</li> <li>Weak treatment of cumulative impacts.</li> <li>Insufficiently detailed mitigation measures.</li> <li>General absence of properly formulated environmental management plans.</li> <li>General absence of hazard vulnerability / risk assessment analyses.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Insufficient appropriate skills / trained persons for EIA study teams.</li> </ul>	<ul style="list-style-type: none"> <li>More training of EIA practitioners required.</li> <li>Workshop/seminar to determine appropriate treatment of impacts commonly encountered in Jamaica.</li> <li>Develop collaboration between NRCA and newly established Jamaica Institute of Environmental Professionals to improve EIA system.</li> </ul>

## 5. OVERALL RECOMMENDATIONS

This section responds to the request of the CED for recommendations arising out the findings of the study to be made in terms of principal actions and interventions that could be made by the IDB in improving the EIA system in the respective countries.

The following recommendations are made from a regional 'Wider Caribbean Basin' perspective:

1. Develop EIA training institution/certification programme that is appropriate to regional needs. From the perspective of the Caribbean, this should address the issues peculiar to tropical islands and tropical coastal ecosystems.
2. Promote/encourage the adoption of EIA process by all Caribbean islands not presently using the system officially.
3. Convene regular regional workshops for practitioners to discuss issues and problems of EIA process.

The following recommendations are made from a national perspective:

4. Support the new Jamaica Institute of Environmental Professionals (JIEP) in development of a certification programme for local EIA practitioners.
5. Support the establishment of an environmental information database for Jamaica, based on the compilation of data contained in EIA reports, data resident in the presently dormant Conservation Data Centre-Jamaica, and from any other relevant sources.

---

**6. APPENDICES**

6. APPENDICES..... 18

Appendix 1 List of project types prescribed under Jamaican environmental law..... 19

Appendix 2 Annex 1..... 21

Appendix 3 Introductory paragraphs to Jamaica National Environmental Action Plan (JANEAP) Status Report 1998..... 25

Appendix 4 NRCA Mission Statement..... 28

Appendix 5 Annex 2..... 29

Appendix 6 Covering letter & list of persons invited to respond to Annex 3..... 32

Appendix 7 English translation of Annex 3.....**Error! Bookmark not defined.**

Appendix 8 Annex 3 - Individual Responses.....*See Volume 2*

Appendix 9 Annex 3 - Summary of responses. ....**Error! Bookmark not defined.**

Appendix 10 Annex 4 - Individual Responses.....*See Volume 2*

Appendix 11 Annex 4 (Table 1) – Summary of responses..... 1

---

**Appendix 1 List of project types prescribed under Jamaican environmental law.**

- Power generation plants
- Electrical transmission lines and substations greater than 69kV
- Pipelines and conveyors, including underground cables, gas lines and other such infrastructure with a diameter of 15 cm and over
- Port and harbour developments
- Development projects:
  - Subdivisions of 10 or more lots
  - Housing projects of 10 houses or more
  - Hotel/resort complex of more than 12 rooms
  - Airports, including runway expansion greater than 20%
  - Office complex greater than 5,000 m<sup>2</sup>
- Ecotourism projects
- Water treatment facilities including water supply, desalination plants, sewage and industrial waste water
- Mining and mineral processing:
  - Bauxite
  - Minerals including aggregate, construction and industrial minerals
  - Peat
  - Sand
  - Metallic
  - Non-metallic
- Metal processing
  - Non-ferrous metals
  - Ferrous metals
  - Foundry operations, metal plating
- Industrial projects
  - Chemical plants
  - Pulp, paper and wood processing
  - Petroleum production, refinery, storage and stockpiling
  - Food processing plants
  - Tanneries
  - Detergent manufacture, including manufacturing of soap
  - Distillery, brewing and fermenting facilities
  - Cement and lime production
  - Manufacture of textiles
  - Manufacture of pesticides or other hazardous or toxic substances
  - Paint manufacture
  - Boxing plants
  - Manufacture of containers and packaging materials including cans, bottles, boxes and cartons
  - Manufacture of edible fats, oils and associated processes
  - Citrus, coffee, cocoa, coconut, sugarcane processing factories
  - Solar salt production
- Construction of new highways, arterial roads and major road improvement projects

- River basin development projects
- Irrigation or water management projects including improvements
- Land reclamation and drainage projects
- Watershed development and soil conservation projects including river training, check dams and retaining walls
- Modification, clearance or reclamation of wetlands
- Solid waste treatment and disposal facilities
- Hazardous waste storage or treatment or disposal facilities
- Processing of agricultural waste
- Cemeteries and crematoria
- Introduction of species of flora, fauna and genetic material
- Slaughterhouse or abattoir
- Felling of trees and clearing of land of 10 hectares or over for agricultural development
- Clear cutting of forested areas of 3 hectares and over on slopes greater than 25 degrees
- Other (please specify)

## Appendix 2 Annex 1.

<b>ANEXO 1. PLANILLA DE VERIFICACION SOBRE EL MARCO LEGAL/PROCEDIMENTAL (*)</b>			
<b>TEMA (**)</b>	<b>SÍ</b>	<b>NO</b>	<b>OBSERVACIONES (***)</b>
1. ¿Existe una política ambiental preventiva en un documento oficial que apoya a la evaluación ambiental?		✓	Refer to: JANEAP 1998 (see Appendix 3) NRCA Mission Statement (see Appendix 4)
2. ¿Existen políticas ambientales sectoriales o locales de carácter preventivo que apoyen la evaluación ambiental?		✓	
3. Existen principios o criterios de protección ambiental explícitos en leyes, reglamentos o documentos formales? (salud, paisaje, etc.)	✓		
4. ¿Existe un documento(s) de carácter legal formal que requiera(n) evaluación ambiental de manera obligatoria?	✓		Section 10, NRCA Act (1991)
5. ¿Existe obligatoriedad de aplicar la evaluación ambiental en un sistema único de carácter nacional?	✓		System used is based on standard international procedures. Guidelines for EIA in Jamaica are available.
6. ¿El sistema único está desagregado a nivel territorial? (regional, provincial, municipal, etc.)		✓	
7. ¿Existen obligaciones sectoriales de evaluación ambiental no integradas ni articuladas entre sí?		✓	
8. ¿Existen obligaciones sectoriales de evaluación ambiental desagregadas territorialmente? (regional, provincial, municipal, etc.)		✓	

<b>ANEXO 1. PLANILLA DE VERIFICACION SOBRE EL MARCO LEGAL/PROCEDIMENTAL (*)</b>			
<b>...continuación</b>			
<b>TEMA (**)</b>	<b>SÍ</b>	<b>NO</b>	<b>OBSERVACIONES (***)</b>
9. ¿Se especifican las responsabilidades y derechos de las instituciones involucradas en el sistema de evaluación ambiental?	✓		NRCA Act (1991).
10. ¿Existe un documento formal que explica los detalles y procedimientos de un proceso clásico de evaluación ambiental y de las obligaciones existentes en el país?	✓		NRCA Guidelines for Conducting Environmental Impact Assessments.
11. ¿Existen instituciones con autoridad específica para revisar y autorizar ambientalmente la ejecución de las actividades propuestas?	✓		Natural Resources Conservation Authority (NRCA).
12. ¿Existen requisitos de incorporación al sistema de evaluación de impacto ambiental? (tipos de proyectos, criterios ambientales, etc.)	✓		Project Information Form (screening) Permit Application Licence to discharge effluents
13. ¿Se regulan los procedimientos administrativos?		✓	EIA process administered by NRCA Permit and Licence Secretariat.
14. ¿Existe(n) listado(s) obligatorio de actividades que deben someterse al sistema de evaluación de impacto ambiental?	✓		Prescribed list of project types requiring EIA (see Appendix 1).
15. ¿Existen exclusiones obligatorias de actividades?		✓	
16. ¿Existen categorías agrupadas de proyectos?		✓	
17. ¿Solicita una evaluación preliminar para ingresar al sistema de evaluación de impacto ambiental y definir requerimientos?	✓		NRCA Project Information Form and submission of terms of reference for approval before commencement of EIA study.
18. ¿Existen categorías de estudios de impacto ambiental?		✓	Scope of EIA defined by approved terms of reference.

<b>ANEXO 1. PLANILLA DE VERIFICACION SOBRE EL MARCO LEGAL/PROCEDIMENTAL (*)</b>			
<b>...continuación</b>			
<b>TEMA (**)</b>	<b>SÍ</b>	<b>NO</b>	<b>OBSERVACIONES (***)</b>
19. ¿Existe cobertura, alcances y contenidos definidos para cada categoría de este estudio?		✓	See comments at #18.
20. ¿Existen Términos de Referencia obligatorios para las categorías de estudios?		✓	TOR defined for specific/relevant issues in each case.
21. ¿Existen guías metodológicas de orientación?	✓		Guidelines for conduct of EIA.
22. ¿Se solicitan expresamente planes de manejo ambiental?	✓		
22.1. ¿Se solicitan programas de mitigación?	✓		
22.2. ¿Se solicitan programas de compensación?		✓	Incorporated in mitigation measures.
22.3. ¿Se solicitan programas de prevención de riesgos y de contingencias?	✓		Now being required in EIA.
22.4. ¿Se solicitan programas de seguimiento y vigilancia?	✓		
23. ¿Se solicita participación ciudadana formal?		✓	NRCA is introducing step whereby public notice is given of proposed EIA. Public hearings required for controversial projects on completion of EIA.
24. ¿Existen mecanismos de participación ciudadana incorporados en las regulaciones?		✓	
25. ¿Existen mecanismos de resolución de conflictos?		✓	
26. ¿Existen métodos de revisión formalizados para revisar estudios de impacto ambiental?	✓		NRCA's Permit and Licence Secretariat coordinates internal technical review process. Internal impact scoping form used.
27. ¿Existen revisiones intermedias por parte de la autoridad?	✓		NRCA will request additional information to be included when/where necessary.
28. ¿Existen plazos de revisión por categoría de estudio de impacto ambiental?		✓	

<b>ANEXO 1. PLANILLA DE VERIFICACION SOBRE EL MARCO LEGAL/PROCEDIMENTAL (*)</b>			
<b>...continuación</b>			
<b>TEMA (**)</b>	<b>SÍ</b>	<b>NO</b>	<b>OBSERVACIONES (***)</b>
29. ¿Existen metodologías obligatorias para identificar impactos ambientales?		✓	Checklists or impact matrices sometimes used.
30. ¿Existe una clasificación obligatoria de impactos ambientales por categorías?		✓	
31. ¿Existen sanciones por incumplimiento de alguno(s) de los requisitos establecidos?	✓		Enforcement notice issued (stop project order) until conditions of permit are fulfilled.
32. ¿Existe un sistema administrativo que permita verificar la situación en que se encuentran los estudios de impacto ambiental (ej. en elaboración, en revisión, aprobado, rechazado, etc)?	✓		Database on status of projects undergoing EIA review being completed by NRCA.
33. ¿Existen archivos administrativos que permitan revisar de situación de cada estudio de impacto ambiental aprobado, rechazado o en trámite?	✓		NRCA EIA database at P&L Secretariat.
34. ¿Se aplican procedimientos o requisitos especiales de evaluación ambiental cuando se trata de actividades vinculadas con el BID?		✓	

---

**Appendix 3 Introductory paragraphs to Jamaica National Environmental Action Plan (JANEAP) Status Report 1998.**

**2.1 A. SUSTAINABLE DEVELOPMENT**

**ISSUES**

Over the last decade, the broad goal of environmental policy in Jamaica has been sustainable development (SD), a path of economic and social development which will ensure that the quality of life for future generations is no worse compared to that which is enjoyed by the present generation. This implies the need for the quality of the environment to be sustained even as the economy continues to develop.

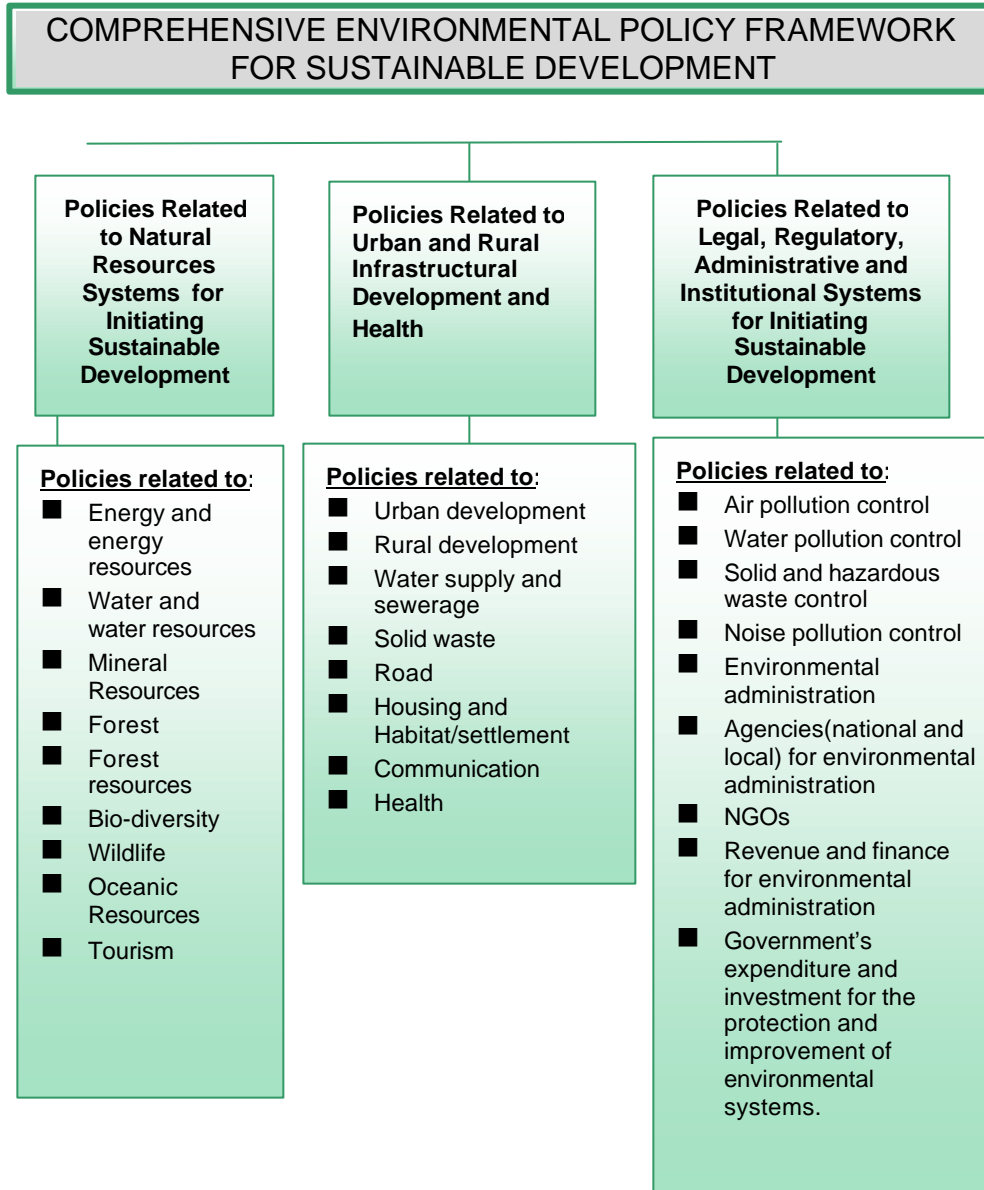
The practice of SD in Jamaica is of particular importance within the unique context of the island where a close relationship exists between the ecological, economic and social systems. Attaining the goal of sustainable development requires that progress be made in linking the ecological, economic and social systems through a process of policy integration in a manner which reflects the unique socio-cultural characteristics of Jamaica.

Sustainable Development planning and policy should also focus on the micro and macro sustainability outcome of environmental/ecological sub-systems such as forest, mangrove, marine, surface and ground water systems, mineral and soil resource system, integrated watershed systems on one hand; and the economic systems such as agriculture, industry, energy, transport, mining, tourism, and infrastructure on the other. Added priority should also be given to the provision of basic social services to the entire population of Jamaica by investing in the provision of better education, water supply, health care and related services, housing, skills training and population control. To be successful however, the broad mix of policies outlined above will have to be complemented by appropriate government enabling economic policies as well as legal, regulatory, administrative and institutional systems for initiating sustainable development (Figure A).

Effective integration of the environment and the economy requires that economic decision making take into account the social costs and benefits of environmental issues. There are various ways of achieving this and no one strategy will be appropriate for all situations. The problem will be to find the right mix in the policy response. The application of environmental economic policy instruments (EEPI) represents one way of achieving the environment-economy integration.

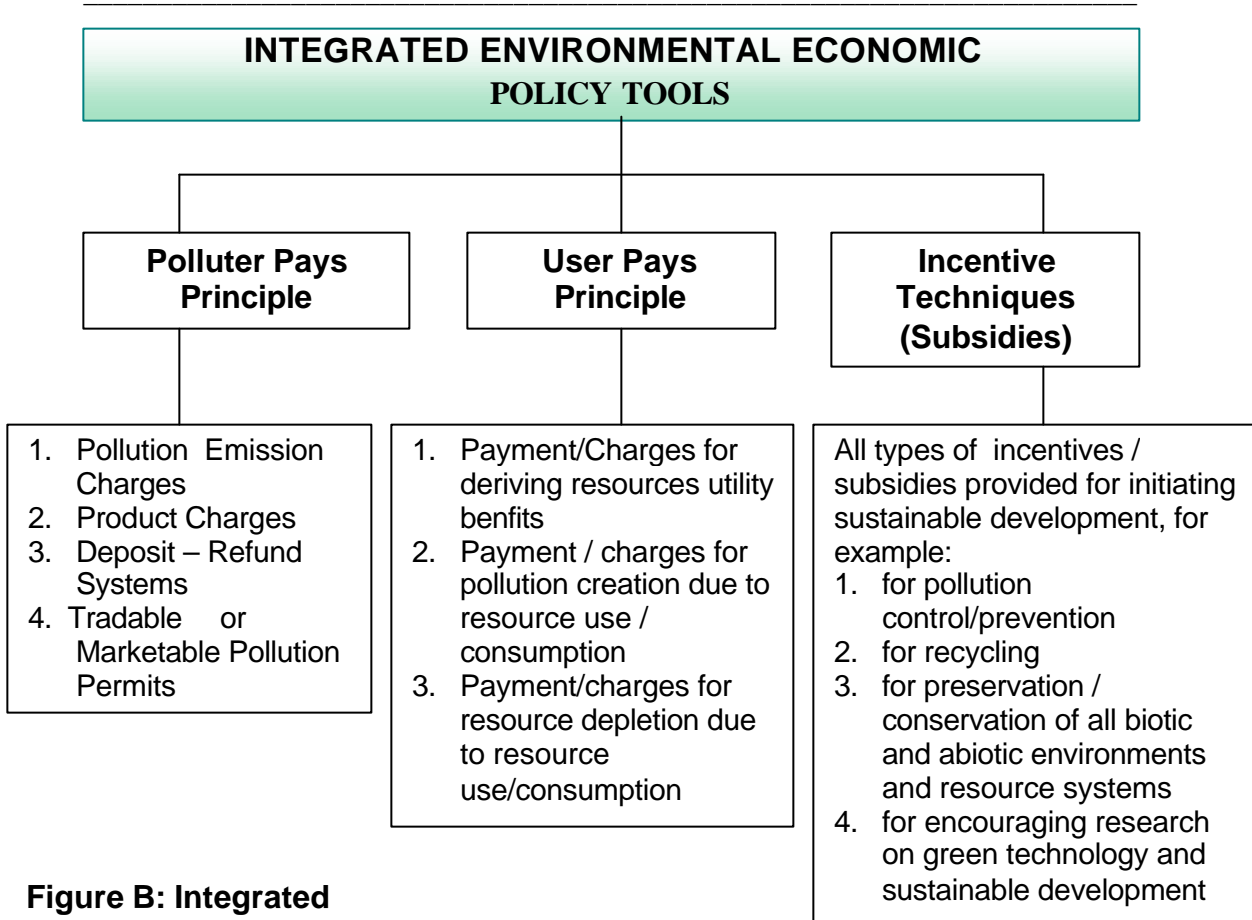
The main rationale behind the use of EEPI relates to the fact that very little recognition has been given to the scarcity of environmental resources with the resulting tendency for extensive price control of natural resources, particularly in developing countries. This situation can be corrected if environmental resources are priced to include the marginal cost of production as well as the external cost

of pollution or resource degradation caused by the polluting good (marginal social cost). EEPI, then, exists to influence behavior among users of environmental resources towards avoiding excessive or wasteful use of natural resources.



**Figure A: Comprehensive Environment Policy Framework for Sustainable Development**

Three broad grouping of integrated Environmental Economic Policy tools can be identified based on the polluter pays principle, the user pays principle and incentive techniques (Figure B).



**Figure B: Integrated Environmental Economic Policy Tools**

Jamaica is in the process of developing and implementing an integrated environmental policy with a view to effecting a multi-dimensional sustainable development process. This programme of the Government of Jamaica is being supported by the Commonwealth Secretariat, London. The major objective of this programme is to determine how EEPI can be applied effectively as a catalytic policy instrument to integrate the environment and the economy and ultimately help to achieve sustainable development. The major environmental management approach so far adopted in Jamaica was chiefly based on command and control measures. Its effectiveness was target and situation specific and was not a holistic one. One of the major advantages of EEPI is that it not only has an effect on identified and intended policy and development targets but also impacts on economic behaviour across entire sectors of the economy social system. Further, the application of EEPI will serve to complement the National Industrial Policy of the Government of Jamaica especially within the context of the liberalisation of the Jamaican economy.

**Appendix 4 NRCA Mission Statement.**

**‘The NRCA exists to provide the management framework for the conservation, protection and sustainable use of Jamaica’s natural resources, in collaboration with its partners in the private and public sectors.’**

Appendix 5 Annex 2.

<b>ANEXO 2. PLANILLA DE VERIFICACION DEL MARCO DE APLICACIÓN E INDICADORES DE FUNCIONAMIENTO DEL SEIA (*)</b>											
Periodo: _____											
INDICADOR (**)	Disponibilidad Información		Número de Estudios					Porcentaje (en relación al total de estudios)			
	SI	NO	Categoría 1	Categoría 2	Categoría 3	Categoría 4	Total	Categoría 1	Categoría 2	Categoría 3	Categoría 4
1. Estudios presentados	✓						70				
2. Estudios aprobados	✓						60				
3. Estudios rechazados	✓						2				
3.1. Estudios rechazados por no utilizar la categoría adecuada		✓*									
3.2. Estudios rechazados por mala calidad técnica		✓*									
3.3. Estudios rechazados por no tener sustentabilidad ambiental		✓*									
4. Estudios en revisión	✓						8				
5. Proyectos que hacen seguimiento de planes de manejo ambiental una vez aprobados los estudios		✓									
6. Proyectos con sanciones/multas por no aplicar planes de manejo ambiental una vez aprobados los estudios	✓						0				
7. Reclamos ejecutados por diversos actores a la decisión de la autoridad	✓						2				

Categoría 1:   N/A   (\* In those cases where an EIA is inadequate, the applicant is requested to provide the supplementary information.)

Categoría 2:   N/A  

Categoría 3:   N/A  

Categoría 4:   N/A

**ANEXO 2. PLANILLA DE VERIFICACION DEL MARCO DE APLICACIÓN E INDICADORES DE FUNCIONAMIENTO DEL SEIA (\*)**

...continuación

INDICADOR (**)	Disponibilidad Información		Número de Estudios					Porcentaje (en relación al total de estudios)			
	SI	NO	Categoría 1	Categoría 2	Categoría 3	Categoría 4	Total	Categoría 1	Categoría 2	Categoría 3	Categoría 4
8. Proyectos con o que tuvieron conflictos ciudadanos	✓						3				
9. Proyectos con participación ciudadana en alguna etapa		✓									
10. Proyectos con aplicaciones de participación ciudadana sólo dentro del proceso de revisión formal	✓						?				
11. Proyectos que no presentaron un estudio de impacto ambiental a pesar de la exigencia	✓						0				
12. Estudios con plazos de revisión respetados según lo establecido		✓									
13. Plazos reales de aprobación de estudios		✓									

Categoría 1: \_\_\_\_\_

Categoría 2: \_\_\_\_\_

Categoría 3: \_\_\_\_\_

Categoría 4: \_\_\_\_\_

**ANEXO 2. PLANILLA DE VERIFICACION DEL MARCO DE APLICACIÓN E INDICADORES DE FUNCIONAMIENTO DEL SEIA (\*)**

...continuación

INDICADOR (**)	Disponibilidad Información		Número de Estudios					Porcentaje (en relación al total de estudios)			
	SI	NO	Categoría 1	Categoría 2	Categoría 3	Categoría 4	Total	Categoría 1	Categoría 2	Categoría 3	Categoría 4
14. Monto de las inversiones por categoría de proyecto		✓									
15. Monto de las inversiones por categoría de estudio ambiental		✓									
16. Número de estudios con <b>verificación expost</b>	?										
17. Número de años desde que se exige EA	✓						3				
18. Cambios a la ley de EA (incluye en trámite)	✓						0				
19. Cambios al reglamento de EA (incluye en trámite)	✓						0				

Categoría 1: \_\_\_\_\_

Categoría 2: \_\_\_\_\_

Categoría 3: \_\_\_\_\_

Categoría 4: \_\_\_\_\_

---

**Appendix 6 Covering letter & list of persons invited to respond to Annex 3.**

---

**ESL Letterhead**

April 5, 2000

*Name*

*Address*

Dear *Name*,

Re: MIREIA (Integrated Methodology for the Review of Environmental Impact Evaluation) – Jamaica.

Funded by the Inter-American Development Bank, the Centro de Estudios para el Desarrollo (Centre for Development Studies), Chile, is carrying out an evaluation of the EIA processes carried out in ten Latin America and Caribbean countries. Jamaica was the only Caribbean country selected. The results of the evaluation will be used by the IDB to determine where and how best to provide assistance in improving the environmental assessment process.

Essentially, the evaluation is comprised of three phases; diagnosis, conclusions, and recommendations. The diagnostic phase is made up of four levels of analysis and these consider:

- Legal and procedural framework for EIA
- Application of EIA
- Perceptions of the EIA process, and
- Sustainability.

The third level, perceptions, requires interviews with a number of persons who are involved/experienced with the EIA process and who represent or are:

- Project proponents,
- Environmental authorities,
- Public organisations and administrative authorities,
- Environmental consultants,
- Community organisations,
- Academic centres, or
- Knowledgeable persons/community leaders.

You have been selected as a person representing one or more of the above categories and you are invited to participate in the evaluation process. This will involve a short personal interview and completing the attached questionnaire. In order to expedite the process I have taken the liberty of sending the form ahead of time for your perusal and consideration.

I shall be contacting you very shortly to confirm your participation, but in the meanwhile, would urge you to agree to undertake the task. It will be an important contribution to the improvement and standardisation of the EIA process, not only regionally but also in Jamaica.

The form was originally provided in Spanish. I have attempted to translate it into English and accept full responsibility for any clumsiness and misinterpretation of language. However, I have also attempted to keep the translation as literal as possible so as not to lose any nuances in the translation.

Appropriate notes are to be made in the **Observations** column to clarify or elaborate on responses, where necessary. Please feel free to contact me should you have any questions regarding the form and/or its contents.

Yours truly,  
**Environmental Solutions Ltd.**

Peter Reeson  
Principal Consultant

Cc: Sr. Guillermo Espinoza, CED, Chile

---

**List of names and categories and of selected persons involved with the EIA process in Jamaica.**

*This section was omitted from this document because it contains confidential information.*

Appendix 11 Annex 4 (Table 1) – Summary of responses.

SUMARIO DE RESUMENES PARA LA VERIFICACION DE DOCUMENTOS		País: <i>JAMAICA</i>				
Numero de estudios: 13		Años: 1996 - 1999				
Calificación Final: Regular = 1, Malo = 12						
TEMAS		Calificación Parcial				
Tópicos considerados	Contenidos de la Revisión	A	P	D	NA	Observaciones
1. Aspectos Formales y Administrativos	1.1. ¿Se cumple con el formato indicado en el reglamento o guías específicas?	10	3			
	1.2. ¿Se cumple con los requisitos básicos establecidos por ley / reglamentos / guías en cuanto a extensión, índice, etc?	10	3			
	<i>Calificación Global:</i>					
	Buena Calidad _____					
	Calidad Intermedia ____					
	Mala Calidad _____					
	1.3. ¿Están presentes todos los contenidos clásicos de un estudio de impacto ambiental?	7	5	1		
	1.4. ¿El lenguaje es simple, directo y fácil comprensión?	11	2			
	1.5. ¿Se presenta un resumen ejecutivo?	9	2	2		
	1.6. ¿Se identifica la ciudadanía involucrada y/o afectada por el proyecto?	7	5	1		
1.7. ¿Se identifican los equipos de trabajo y los responsables del estudio?	6	2	5			
1.8. ¿Se identifican fácilmente las modificaciones introducidas al documento durante la revisión formal?				13		
1.9. ¿El documento es de fácil acceso al público?	13					
1.10. ¿Están identificadas las fuentes de información y las referencias bibliográficas?	5	6	2			

**Calificación:**    **A:** Aceptable Totalmente    **P:** Parcialmente Aceptable    **D:** Deficiente    **NA:** No Aplicable

## SUMARIO DE RESUMENES PARA LA VERIFICACION DE DOCUMENTOS

País: \_\_\_\_\_

Nombre del estudio: \_\_\_\_\_

Año del estudio: \_\_\_\_\_

TEMAS		Calificación Parcial				
Tópicos considerados	Contenidos de la Revisión	A	P	D	NA	Observaciones
<b>2. Aspectos Técnicos y de Contenidos</b>  <i>Calificación Global:</i>  Buena Calidad _____  Calidad Intermedia ____  Mala Calidad _____	2.1. ¿Están claramente descritos los objetivos del proyecto?	12	1			
	2.2. ¿Está claramente justificado el proyecto?	11	2			
	2.3. ¿Se analizan y describen las alternativas posibles del proyecto?	3	8	2		
	2.4. ¿Hay antecedentes suficientes para describir el proyecto y sus características, incluyendo los aspectos económicos y sociales en sus distintas etapas de diseño, construcción, operación y abandono?	4	9	1		
	2.5. ¿Está claramente identificada la normativa legal aplicable al proyecto y que fija el marco para las decisiones?	10	3			
	2.6. ¿Están indicadas las duraciones de las fases de construcción y operación y abandono del proyecto, y sus conexiones con otras actividades o proyectos?	3	4	6		
	2.7. ¿Están descritas todas las relaciones e implicancias que el proyecto tiene sobre las actividades de la población, incluyendo las personas que serán ocupadas y desplazadas?	6	5	2		
	2.8. ¿Está adecuadamente descrita y presentada la localización del proyecto y sus conexiones?	10	3			
	2.9. ¿Están indicadas las restricciones a la localización contempladas en las leyes tales como planes de ordenamiento, áreas protegidas, áreas declaradas monumento nacional, etc., con respecto a dónde se va a localizar el proyecto?	6	3	2	2	
	2.10. ¿Están claramente justificadas las razones de porqué se presenta la correspondiente categoría de estudio ambiental?	5	4	1	3	

**Calificación:**

**A:** Aceptable Totalmente

**P:** Parcialmente Aceptable

**D:** Deficiente

**NA:** No Aplicable

## SUMARIO DE RESUMENES PARA LA VERIFICACION DE DOCUMENTOS

País: \_\_\_\_\_

Nombre del estudio: \_\_\_\_\_

Año del estudio: \_\_\_\_\_

TEMAS		Calificación Parcial				
Tópicos considerados	Contenidos de la Revisión	A	P	D	NA	Observaciones
	2.11. ¿Está clara e identificada el área afectada y área de influencia del proyecto más allá del área de localización?	5	6	2		
	2.12. ¿Se muestran las consecuencias de la presencia física del proyecto en el medio ambiente, así como los cambios más importantes que se producirán?	6	6	1		
	2.13. ¿Hay descripciones detalladas de los componentes relevantes del medio ambiente local elegido para la localización y sus alrededores, incluyendo mapas?	5	7	1		
	2.14. ¿Están identificados todos los elementos del ambiente que están relacionados directa e indirectamente con el proyecto y adecuadamente cubiertos en la línea base?	5	8			
	2.15. ¿Han sido consultados (o elaborados si no existen) los inventarios y levantamientos de información básica que dan una imagen de la situación actual (línea de base) de los elementos del medio ambiente a ser afectados, y cómo evolucionaría éste si el proyecto no fuera realizado?	5	7	1		
	2.16. ¿Se describe adecuadamente el medio físico?	7	6			
	2.17. ¿Se describe adecuadamente el medio natural (flora, fauna, ecosistema)?	3	10			
	2.18. ¿Se describe adecuadamente el medio humano, incluyendo costumbres y aspectos culturales?	5	4	4		
	2.19. ¿Se describe adecuadamente el paisaje?	2	4	4	3	
	2.20. ¿Se describe adecuadamente la calidad del ambiente (contaminación)?	2	8	3		

**Calificación:**

**A:** Aceptable Totalmente

**P:** Parcialmente Aceptable

**D:** Deficiente

**NA:** No Aplicable

## SUMARIO DE RESUMENES PARA LA VERIFICACION DE DOCUMENTOS

País: \_\_\_\_\_

Nombre del estudio: \_\_\_\_\_

Año del estudio: \_\_\_\_\_

TEMAS		Calificación Parcial				
Tópicos considerados	Contenidos de la Revisión	A	P	D	NA	Observaciones
	2.21. ¿Se describe adecuadamente el valor ambiental y la fragilidad del área afectada?	4	8	1		
	2.22. ¿Están descritas adecuadamente las metodologías para línea de base y su aplicación es correcta para los ambientes y tipo de proyecto?	4	7	2		
	2.23. ¿Han sido señalados y descritos los impactos significativos del proyecto sobre el medio, y han sido determinados a partir de la línea de base (situación sin proyecto)?	6	7			
	2.24. ¿Está claramente establecido si los impactos son: positivos o negativos; acumulativos; de corto, mediano o largo plazo; permanentes o temporales; directos o indirectos; etc.? (indicar cuáles son las categorías de impactos más utilizadas)	2	11			
	2.25. ¿Está explicado el modo en que se identificaron los impactos y está bien explicada la metodología utilizada? (indicar cuál es la metodología)	2	6	5		
	2.26. ¿Están adecuadamente jerarquizados y valorados los impactos significativos del proyecto y descritas las metodologías utilizadas? (indicar cuál es la metodología)	3	7	3		
	<b>2.27. ¿Están adecuadamente descritas las características y el comportamiento de los impactos?</b>	4	7	2		
	2.28. ¿Están descritos los métodos de predicción de la magnitud de los impactos, y son apropiados a la significación de las perturbaciones ambientales esperadas?	2	8	3		

**Calificación:**

**A:** Aceptable Totalmente

**P:** Parcialmente Aceptable

**D:** Deficiente

**NA:** No Aplicable

## SUMARIO DE RESUMENES PARA LA VERIFICACION DE DOCUMENTOS

País: \_\_\_\_\_

Nombre del estudio: \_\_\_\_\_

Año del estudio: \_\_\_\_\_

TEMAS		Calificación Parcial				
Tópicos considerados	Contenidos de la Revisión	A	P	D	NA	Observaciones
<b>3. Sustentabilidad Ambiental</b>  <i>Calificación Global:</i>  Buena Calidad _____  Calidad Intermedia ____  Mala Calidad _____	3.1. ¿El documento presenta un Plan de Manejo Ambiental bien estructurado y con las medidas bien caracterizadas?	1	8	4		
	3.2. ¿El documento presenta un programa de medidas de mitigación aplicables y suficientemente detallado?	2	9	2		
	3.3. ¿Están las acciones de mitigación y medidas de manejo elegidas bien justificadas?	3	9	1		
	3.4. ¿El documento presenta un programa de prevención de riesgos y de contingencias adecuado y detallado para responder a accidentes?	1	5	7		
	3.5. ¿Se han considerado alternativas posibles para la instalación del proyecto, discutiendo las ventajas y desventajas de cada una en función de los impactos no deseados y señalando las razones para la elección final?	2	7	3	1	
	3.6. ¿Se han considerado acciones pertinentes de procesos, diseño, tecnología y condiciones de operación en función de sus efectos sobre el ambiente, y se señalan las razones para la decisión final?	3	6	1	3	
	3.7. ¿Se han considerado todos los impactos adversos importantes para definir las medidas de mitigación, de prevención de riesgos, medidas de contingencias y medidas compensatorias y se presenta alguna evidencia de que éstas serán efectivas?	4	9			
	3.8. ¿Se respondió adecuadamente a la prevención de los impactos significativos?	5	7	1		
	3.9. ¿Se identifican con claridad las mejorías ambientales con el EIA del proyecto?	4	9			

**Calificación:**

**A:** Aceptable Totalmente

**P:** Parcialmente Aceptable

**D:** Deficiente

**NA:** No Aplicable

## SUMARIO DE RESUMENES PARA LA VERIFICACION DE DOCUMENTOS

País: \_\_\_\_\_

Nombre del estudio: \_\_\_\_\_

Año del estudio: \_\_\_\_\_

TEMAS		Calificación Parcial				
Tópicos considerados	Contenidos de la Revisión	A	P	D	NA	Observaciones
	3.10. ¿Están indicadas las medidas de control para los impactos, así como un cronograma para su aplicación y aparecen indicados los impactos no mitigados y las razones de ello?		4	9		
	3.11. ¿Se presenta un presupuesto para las medidas de mitigación y compensación?	1	2	10		
	3.12. ¿Se establece un compromiso del responsable del proyecto para llevar a cabo las medidas de control señaladas y se presentan planes detallados de cómo se harán?	1	4	8		
	3.13. ¿Se proponen programas de seguimiento y vigilancia detallando los impactos principales durante las fases de construcción, operación y abandono?	1	4	8		
	3.14. ¿Se presenta un presupuesto para dotar de recursos al programa de vigilancia y seguimiento?			13		
	3.15. ¿Se presenta el Plan de Participación para dar a conocer el estudio de impacto ambiental y para mitigar impactos sobre la población?		4	9		
	3.16. ¿Está adecuadamente consultada la ciudadanía y se demuestra su participación durante la realización del estudio de impacto ambiental?	2	5	6		

**Calificación:**

**A:** Aceptable Totalmente

**P:** Parcialmente Aceptable

**D:** Deficiente

**NA:** No Aplicable