State of Kuwait

The Environmental and Social Impact Assessment System in The State of Kuwait

www.epa.org.kw

State of Kuwait

The Environmental and Social Impact Assessment System in The State of Kuwait

Environment Public Authority
Planning & EIA Department
2016

Foreword - Kuwait Environment Public Authority

The Environment Public Authority in Kuwait (KEPA) had conducted with the World Bank's assistance an in-depth review of its environmental impact assessment system (EIA) with the objective to improve the efficiency and effectiveness of this system so that Kuwait could have a credible and operational EIA system. Improving that system would elevate the image of Kuwait in the international arena for environmental protection in general and for facilitating further local and foreign direct investments. The World Bank recommendations came out that it was necessary to develop clear guidelines and procedures and to strengthen the EIA system in the State of Kuwait with participation from the relevant authorities, stakeholders and interested groups in the EIA procedures and guidelines.

In response to the World Bank recommendations, the following « Guidelines for the Environmental and Social Impact Assessment System (ESIA) in the State of Kuwait» were developed by a dedicated team of experts and staff from the Kuwait Environment Public Authority (KEPA) and the World Bank who have worked together very closely and efficiently during this project to produce the ESIA guidelines and procedures and its annexes taking in consideration the best international practices in this field.

This report highlights the objective of the environmental and social assessment process (ESIA); revises the screening categories for projects that require an ESIA; highlights the need for public consultation and sharing of information as part of the EIA process; and describes the steps and procedures that should be followed. It also defines the roles and responsibilities of the various stakeholders in the ESIA process.

These new guidelines fulfil the requirements set in item No (14) of Article (7) of the new Environmental Protection Law (No 42/2014). It is hoped that these guidelines and procedures will improve the environmental management process in Kuwait and would enhance the level of public awareness about the general environmental issues in general and about the environmental and social impact assessment system in particular.

We would like to emphasize the importance of the collaborative efforts of all ministries, organizations, the public sector and the investors for achieving the goal of the ESIA process and hoping at the same time that the implementation of the development and industrial projects would not adversely affect human health and that the ESIA process would help to preserve the natural resources for our future generation and achieve sustainable development.

We also would like to acknowledge the dedication and collaboration we had observed from all staff of the Planning and Environmental Impact Assessment Department (P&EIAD) and from the representatives of the public sector, government authorities, and non-governmental organizations who have had actively participated in the process of developing the ESIA guidelines and its annexes.

Al-Sheikh Abdullah Ahmad Al Hamoud Al Sabah
Chairman of the Board and Director General
Environment Public Authority

Foreword – The World Bank

It is my great pleasure to introduce, on behalf of the World Bank, the "General Guidelines and Procedures for Environmental Impact Assessment System in the State of Kuwait». These guidelines and procedures are the result of hard work and dedication of the management and staff of the Kuwait Environment Public Authority (KEPA) and the team of World Bank experts.

These guidelines were prepared as part of the Kuwait Environmental Action Program (KEAP), under a reimbursable advisory services agreement. The KEAP aims to improve the environmental management system in Kuwait as means to achieving a level of environmental sustainability that could generate financial and economic benefits and help establish clear, transparent and predictable environmental regulations that would contribute towards improving the investment climate in the country.

The State of Kuwait is one of the first countries in the Gulf Cooperation Council region to introduce the environmental and social impact assessment (ESIA) system as means of protecting Kuwait's environment, and has made significant progress in building and strengthening its EIA system, as part of the overall environmental management system in Kuwait.

An effective and efficient ESIA system helps to drive developers of new projects to take environmental impacts and risks into account, and allows governments and society to analyze projects in depth. However, ESIA is only one instrument in an array of environmental and sustainability management tools, and as such, its effectiveness is enhanced when ESIA is applied in combination with other environmental management mechanisms such as strategic environmental assessment, land use planning, market based instruments, access to information and public consultation, and environmental regulations, standards and enforcement. Strengthening the capacity of the different actors (including the government, private sector and civil society) to allow them to contribute more effectively towards Kuwait's sustainability objectives.

The preparation and publication of the ESIA guidelines and procedures is a first step towards the implementation of the ESIA system in the State of Kuwait. The implementation phase of the proposed guidelines and procedures should be accompanied by coaching and mentoring of the staff in relevant organizations as well as by a monitoring and evaluation to allow for adjustment in the system as necessary. It is my hope that this joint effort will lead to follow up actions through the implementation of the new ESIA system, as a step for Kuwait to reach its growth and sustainability objectives.

Dr. Bassam Ramadan
The World Bank

EIA Project Team

Eng. Sameera Al-Kandari	Manager of Planning and EIA Department Head of EIA Team Environment Public Authority- Kuwait
Ms. Samia Al-Duaij	Environment Officer and Task Team Leader of the Kuwait Environmental Action Program The World Bank
Dr. Sherif Areef	Senior Environmental Consultant The World Bank
Dr. Marwan Al-Dimashki	Senior Environmental Consultant Environment Public Authority- Kuwait
Dr. Mohammad Samir Massoud	Senior Environmental Consultant Environment Public Authority- Kuwait
Eng. Eman Al-Kandari	Head of the Development Projects Section Planning and EIA Department Environment Public Authority- Kuwait
Eng. Abdallah Al-Otaiby	Head of the Industrial Projects Section Planning and EIA Department Environment Public Authority- Kuwait
Mr. Wael Ahmed Al-Matar	Head of the Environmental Planning Section Planning and EIA Department Environment Public Authority- Kuwait
Ms. Alaa Saleh BoSafar	Industrial Projects Section Planning and EIA Department Environment Public Authority- Kuwait

Acronyms

CGA	Competent Governmental Authority
EIA	Environmental Impact Assessment
ESIAS	Environmental and Social Impact Assessment Study
ESA	Environmental and Social Assessment
ESAR	Environmental and Social Assessment Report
EAF	Environmental Assessment Form
EMP	Environmental Management Plan
EP	Environment Permit
EPA	Environment Public Authority
EST	Environmental Screening Team (at KEPA)
KEAP	Kuwait Environmental Action Programme
KEPA	Kuwait Environment Public Authority
KNPC	Kuwait National Petroleum Company
KOC	Kuwait Oil Company
NGO	Non-Governmental Organization
PAI	Public Authority for Industry
P&EIAD	Planning and Environmental Impact Assessment Department
PP	Project Proponent
RA	Relevant Authority
WB	The World Bank

Table of Contents

List of Figures

List of Annexes

Introduction

Purpose of the ESIA guidelines

The purpose of these guidelines is to:

1. Describe the objective of the Environment and Social Assessment (ESA) process and its legal requirements.
2. Identify which projects are subject to an ESA.
3. Identify the criteria for categorizations (screening lists) of these projects and their different types of assessment are required .
4. Describe the requirements for Environment and Social Assessment in different categories .
5. Describe the roles and responsibilities of the Kuwait Environment Public Authority (KEPA), Relevant Authorities (RA), and the Project Proponent (PP).

Definitions

The following definitions will be used in this report:

- **Environment and Social Assessment (ESA)**: is a procedural tool whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. ESA evaluates a project's potential environmental and social risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, site selection, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental and social impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental and social impacts throughout project implementation. Preventive measures are always preferred over mitigation or compensatory measures, whenever feasible.

The result of the ESA process is a report which could be in one of the following forms:

1. A comprehensive Environmental and Social Impact Assessment Study (ESIAS).
2. A report on the Environmental and Social Assessment (ESAR).
3. A standard form for the Environmental Assessment (EAF) which should be filled with basic information and data about the project/activity.

The developed screening procedures and screening lists (attached in Annex B) will enable the Environment Public Authority to define under which category a project would fall in.

- **Area of Influence:** The area of influence of the project includes the proposed project site (or alternative sites) and related facilities that the proponent develops or controls; and areas that potentially could be affected by the cumulative impacts from other development projects in the study area.
- **Trans-boundary Issues:** Include air and water pollution and other forms of pollution that may crosses political, governmental, or geographical boundaries; abstraction of water from or pollution of international waterways.
- **Environmental and Social Impacts Assessment Study (ESIAS):** A comprehensive and detailed document for major projects which are screened under "Category (A)" to identify and assess the potential positive and negative, direct or indirect and cumulative of environmental and social impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures in the form of an Environmental Management Plan ; and be submitted for consultation and disclosure.
- **Environmental and Social Assessment Report (ESAR):** is a document prepared for projects which are screened under "Category (B)". This report would help to evaluate, mitigate and monitor the environmental and social impacts. This report contains a description of the project, the analysis of the environmental and social impacts and the mitigating, monitoring and institutional measures in the form of an Environment Management Plan (EMP) to be submitted for public consultation.
- **Environmental Assessment Form (EAF):** This form is filed for activities and workshops screened under "Category (C)" to identify possible environmental impacts.
- **Environmental Permit (EP):** is a set of conditions derived from the ESIAS, the ESAR or the EAF to which the project proponent should comply within a limited duration to prevent, diminish or compensate the impacts on human health and the environment.
- **Environmental Management Plan (EMP):** consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental impacts, offset them, or reduce them to acceptable levels. The plan also includes the actions needed to implement these measures.
- **Self-Monitoring Report:** It is an environmental monitoring reported submitted the Project Proponent to KEPA.
- **Project Proponent (PP):** Is the person, the governmental organization, the private sector or the joint venture requesting an environmental permit as part of the license to establish the project/activity.

- **Competent Governmental Authority (CGA):** is a governmental organization that has the legally delegated or invested authority, capacity, or power to perform a designated function.
- **Environmental Consulting Office/Firm:** is an office or firm approved by KEPA for practicing environmental consultation, preparing ESIAS, ESAR, EAF, assessment of the current environmental situation, and performing the environmental audits.
- **Administration Fee**: is the fee paid to the Environment Public Authority in return of issuing the Environmental Permit.

Institutional and Legal Framework in Kuwait

Item 14 of Article (7) of the Environmental Protection Law (No 42/2014) states that « Preparing a system for environmental impact assessment of the different State projects, and developing the necessary guidelines and procedures, as well as giving its firm opinion prior to the approval of their execution by the concerned authorities». In addition, Article (16) of law No 42/2014 states that « All entities subject to the provisions of this law are prohibited to commence the implementation of any project, or conducting any alterations or expansions to the existing activities, or obtaining any licenses of the same, but after carrying out environmental impact assessment studies pursuant to the rules, regulations and procedures set by the Executive Bylaw of this law». The Environment Public Authority issued in 2010 the Resolution No 709 for the reorganization and adoption by the EPA of the procedures for the accreditation and renewal of the National Environmental Consulting Firms to carry out environmental services, prepare EIA studies and EIA reports, and evaluate the existing environmental conditions and environmental auditing. The national environmental consulting firms are annually evaluated and classified by KEPA under two Classes; Class (A) and Class (B).

The Environment Public Authority in Kuwait coordinates its work on environmental issues and environmental impact assessment with relevant governmental organizations, private sector and the joint venture in the state of Kuwait.

Project Screening Process

Definition:

"Project Screening" is a process by which a decision is taken on whether or not ESIA is required for a particular project. The classification of the project depends on the nature, type, location, as well as the nature and magnitude of its potential impacts

Screening Application Form

The proponent is required to prepare a project application form with a rough draft of the project as described in Annex (A) and submit it to KEPA. Usually, the application form is submitted after the project site is selected. KEPA›s requirement should be that the application from should be submitted at the project concept stage and before the proponent starts any project development.

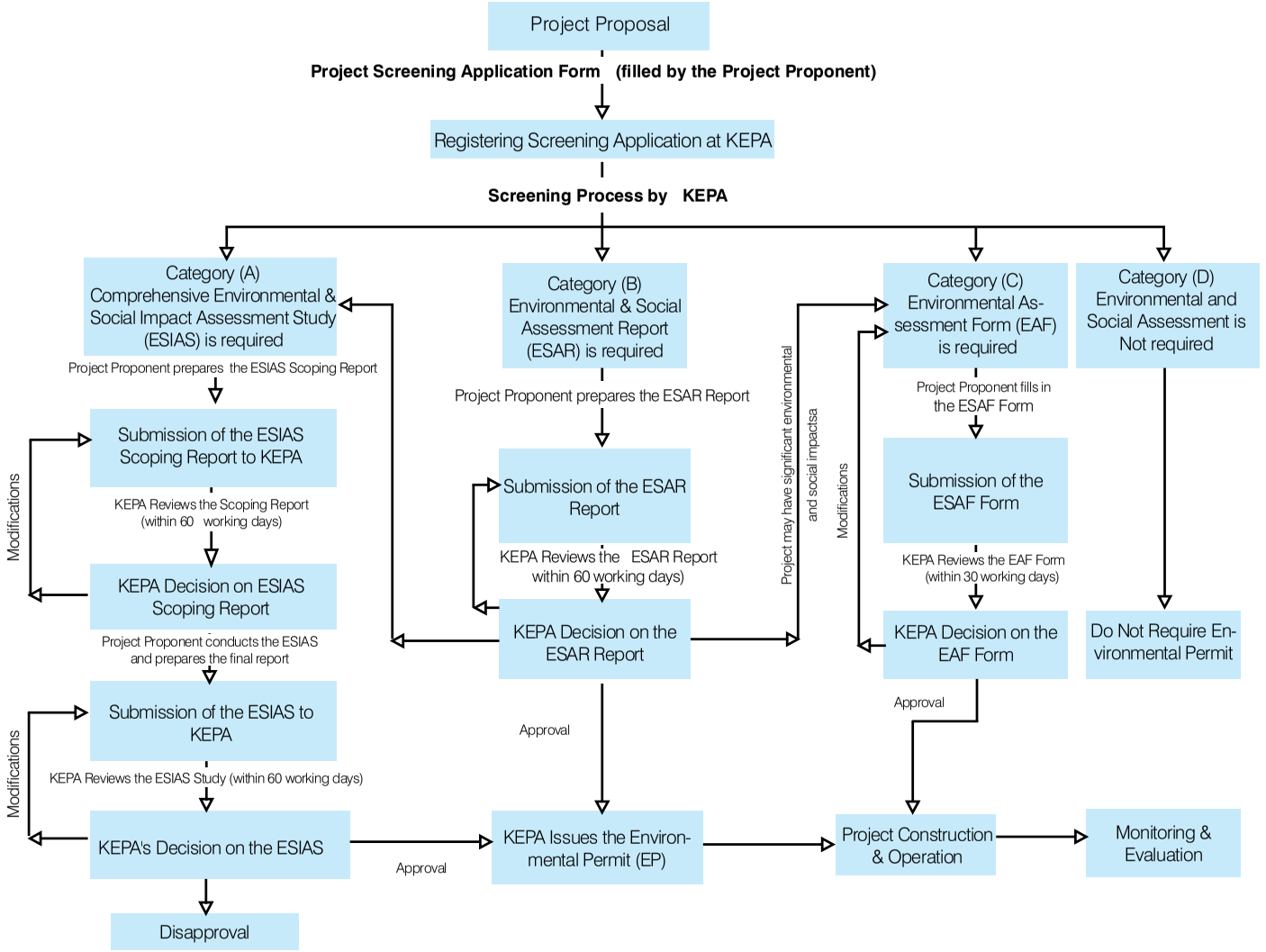
Screening Categories

The application form is forwarded to the Environment Public Authority.

The category of the project will be based on the four screening lists attached in Annex (B) to this document and will consist of the following four categories and are presented in Figure 1 :

1. **Category (A)** includes a list of projects (presented in Annex B-1) for which a detailed and comprehensive Environmental and Social Impact Assessment Study (ESIAS) is mandatory. Projects in this category would have by their magnitude and severity, potential significant adverse social or environmental impacts that are diverse, irreversible, or unprecedented.
2. **Category (B)** includes a list of projects (presented in Annex B-2) for which an Environmental and Social Assessment Report (ESAR) is required. Projects in this category will have by their magnitude and severity, limited potential adverse social or environmental impacts that are few in number, site-specific, largely reversible, and readily addressed through mitigation measures.
3. **Category (C)** includes a list of activities and workshops (presented in Annex B-3) for which only an Environmental Impact Form (EAF) should be filled in. Activities in this category will have very limited environmental impacts.
4. **Category (D)** is a list of activities and workshops (presented in Annex B-4) which have no adverse impacts and therefore do not require an Environmental Permit.

FIGURE (1): Environmental and Social Impacts Assessment System (ESIA) in Kuwait



Scope of the Screening:

The above classification applies to all new projects as well to existing facilities. Existing facilities will be also screened whenever there are:

1. Expansions in capacity.
2. Adding a new component/production line to the existing project.
3. Changing the activity.
4. In-process modification (i.e., changing the production pattern of machines or units) or in-plant modifications (i.e., modifications in buildings, infrastructure).

Screening Limitations :

1. Project screening lists provided in Annex (B) consist of four types (B-1, B-2, B-3 and B-4). The first two lists (Annex B-1 and Annex B-2) describe the sectors, types, sizes and thresholds of projects that are known to have/or considered to have significant or serious environmental impacts on human health and the environment. The listed projects in Annex (B-1) will be subject to full and comprehensive ESIA. The listed projects in Annex (B-2) will be subject to submit only an Environment and Social Assessment Report (ESAR) unless during the ESA process it was found that the impacts have substantial environmental significance such as high emission levels or proximity to sensitive and protected areas . In such cases, a full and comprehensive ESIA study is required. Annex (B-3) includes a list of activities and workshops which have limited environmental impacts (where an ESIAS or ESAR is not required), and therefore the proponent of the project fill in the Environmental Assessment Form (EAF) and the «Environmental Permit» is issued under conditions set by KEPA. Annex (B-4) includes a list of activities and workshops that are exempt from the Environmental and Social Assessment process because they are known to have very little or no environmental impacts, and therefore, no environmental permit is required.
2. The proposed projects screening lists should be revised and updated over time to incorporate future changes in development plans, infrastructure and pollution levels and environmental standards.
3. In case a project cannot be found in any of the four screening lists, the project proponent should submit a request to KEPA (using the form in Annex A). The KEPA will provide a written response on the final decision regarding the categorization of the project.
4. Whenever the project is located in a sensitive area (the areas considered sensitive are listed in Annex (C), and the project was initially classified in a specific Category (B) or (C), it will be reclassified into a higher category.

5. The P&EIAD at KEPA reserves the right to reclassify a project falling under Category (B) or Category (C) into the higher Category (A) if during the screening process the proposed project was found to have significant environmental and social impacts.

Screening Review:

The «Screening Team» will consult with each other in order to agree on a specific classification of the proposed project. Annex (D) provides the «Site Selection Criteria» which should be observed.

Initial ESA Notification

Once the report is approved by the KEPA , the relevant authority and the Project Proponent will be notified in writing.

Guidelines for Projects under Category (A)

(Projects which require the submission of a full and comprehensive ESIA Study)

The ESIA process for projects falling under Category (A) (as identified in Annex B-1) is described in Figure 2 below. Category (A) projects requires submission of the following documentation;

1. ESIA Scoping Report including consultation with public and relevant parties.
2. Environment and Social Impact Assessment Study (ESIAS) including public consultation and disclosure.
3. Disclosure of the ESIAS
4. Self- monitoring Report on Construction and Operation

Responsibilities

The responsibilities for preparing and reviewing the above documentation are as follows:

1 - KEPA will be responsible for:

- Conducting the screening process.
- Conducting field visit for siting
- Review of the ESIA Scoping Report
- Review of the draft ESIAS
- Issuance of the Environmental Permit
- Review of the self -monitoring report for Construction and Operation
- Supervision of the Environmental Permit

2 - The Project Proponent will be responsible for:

- Hiring the services of an Environmental Consulting Firm (approved by P&EIAD /KEPA under Class A) to conduct the ESIA process and prepare the ESIA Study.
- Submitting the ESIA Scoping Report to KEPA/P&EIAD for approval.
- Submitting the ESIA Study and including public consultation and disclosure.
- Submitting the self - monitoring report to KEPA for review and approval.
- Paying of the associated administration fees for issuing the Environmental Permit by KEPA.

- Implementing the conditions listed in the Environmental Permit.

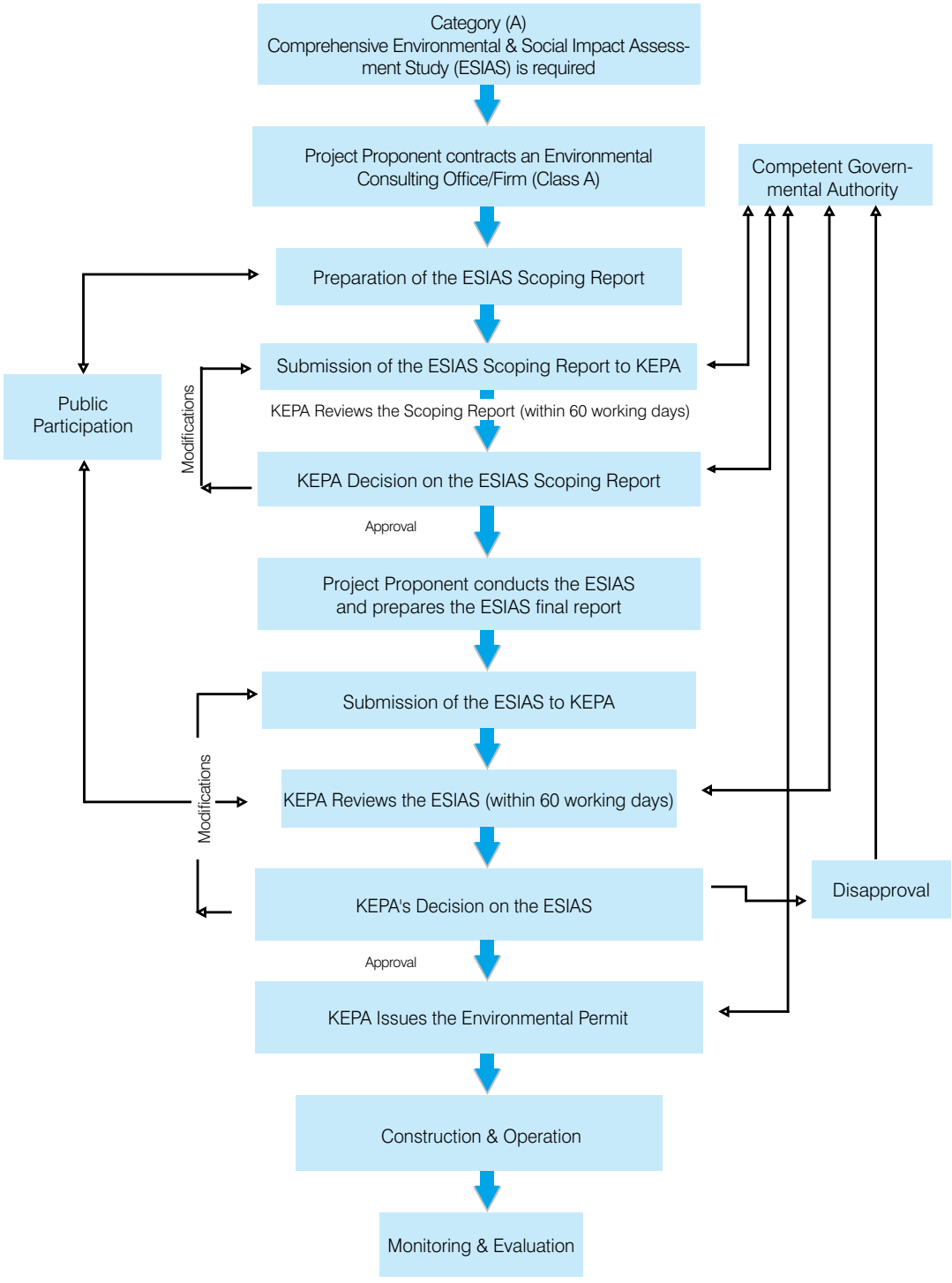
3 - The Competent Governmental Authority (CGA) is a governmental authority/ institution that will have the responsibility for:

- Reviewing the Project Screening Form prepared by the Project Proponent before it is being submitted to KEPA.
- Submission of the completed Project Screening Form in a formal letter to KEPA.
- Participate in the review meeting for the scoping and the review of the ESIA Study
- Issue, deliver and renew the license for construction and operation on the basis of the Environmental Permit.
- Monitoring the implementation of the Environmental Permit during construction and operation.
- Issue the necessary administrative warning and execute court orders concerning violations by the proponent of the environmental permit and/or closure of the plant.

4 - **The Environmental Consultancy Office/Firm:** is a consultant office/firm approved by KEPA for conducting the environmental consultancy activity or preparation of environmental impact assessment studies or assessment of the current situation of existing projects/facilities or performing environmental auditing. The Environmental Consultancy Office/Firm will have the responsibility for:

- Act as the coordinator between the Project Proponent and KEPA during all stages of the ESIA study.
- Conducting the scoping process and prepare the ESIA Scoping Report including consultation with the public and stakeholders affected by the project.
- Participate in the review meeting for the ESIA scoping process.
- Prepare the comprehensive ESIA study.
- Prepare the self -monitoring report for Construction and Operation.
- Prepare and participate in all public participation meetings.
- Prepare and fill the form of the Environmental Permit for approval by KEPA.

Figure (2): the ESIA Process for Category «A» Projects



Reviewing of the ESIA Study

The reviewing checklist in Annex (E) will be attached to enable the Project Proponent to know in advance how the ESIA report will be reviewed by KEPA. Its objective is to assist the Project Proponent and its Environmental Consultancy Firm/ Office to know well in advance and to define the criteria of the evaluation process so that the ESIA report will be complete and information suitable to enable KEPA to make an informed decision of the approval/or disapproval of the ESIA report.

The Scoping Phase

Definition: Scoping is an interactive process to identify the contents, extent and relevance of the environment and social information to be submitted to KEPA as part of the ESIA procedure. Such interactive procedure should be conducted between the Project Proponent, KEPA, people affected by the project and the stakeholders (governmental organizations, NGOs, and media). The result of the scoping process is the ESIA Scoping Report.

The scoping process will define the issues that need to be addressed in the ESIA process, taking into consideration the specific context in which the project will be implemented. The activities, agenda and budget for the ESIA Study will be determined on the basis of the conclusions of the ESIA scoping study.

The ESIA Scoping Report should provide the following results:

1. an overview of the project, the applicable legislative and institutional framework;
2. an indication of the project alternatives;
3. a description of the key stakeholders, people affected by the project and their concerns;
4. a description of the key environmental aspects and project-environment interactions that should be addressed in the ESIA;
5. a description of the geographical area to be considered in the environmental baseline and in the identification of impacts;
6. recommendations on specific impacts identification and evaluation methodologies to be used in the ESIA;
7. Indication of the time frames, costs and resources needed to carry out the EIA Study.

The Scoping Process.

After being notified by KEPA of the classification of the project, the Project Proponent will advertise the project to inform the public and stakeholders and request their participation. In parallel, the Environmental Consultancy Firm/Office (Class A)

will start the scoping process, prepare and submit the ESIA Scoping Report and schedule a consultation meeting in which it will make a presentation of the project, its area of influence, ,the significant environmental issues, as well as the potential direct, indirect and cumulative impacts to be examined.

The ESIA Scoping Report must contain the following points (full details are presented in Annex F):

1. A non- technical summary in English and Arabic.
2. Description of the project, its cost and its implementation schedule.
3. Description of the project alternatives with "a no-project base option "considered.
4. Description of the surrounding environment and the area of influence likely to be affected by the project.
5. Description of the likely significant impacts of the project (short-term and long-term impacts, positive or negative impacts, direct, indirect and cumulative impacts including the impacts on global environment).
6. Description of the framework for the mitigating and monitoring measures.
7. Summary of the public consultation including the remarks and feedback from the public.
8. Indication of the time-frame, costs and resources needed to carry out the ESIA process.

Public Consultation during EIA Scoping

Objectives of the Public Consultation:

1. The purpose of the consultation is to reach agreement on the scoping report and identify aspects and elements that will be included in the ESIA study.
2. Accordingly, it is equally important to require that the project affected people and the stakeholders will provide their opinions on the potential aspects and impacts of the project
3. There is no one unique method of consultation. Pubic consultation should be compatible with the traditions and cultural habits of Kuwait. Consultation can be held either with each individual groups or party or in a unified meeting through invitation or advertisement in the press. In both cases, the Environmental Consultancy Firm/Office should summarize the finding and the methodology used for consultation.

The following will be made available at the public consultation meeting:

1. A copy of the draft ESIA Scoping Report with an executive summary in Arabic

2. A power point presentation in Arabic by the exerts of the Environmental Consultancy Firm/Office on the different aspects and contents of the ESIA scoping report
3. A list of the parties and communities that are likely to be affected negatively by the project
4. The commitment of the Project Proponent to include all relevant issues raised during the meeting as part of the ESIA Study as well as to preserve the environmental quality of the neighbouring communities and the surroundings of the project
5. Additional aspects and issues to be addressed in the ESIA Study

The organizations that will be consulted or some of them according to the plan mentioned in the scoping study:

1. Representatives of the sector ministries and the Competent Governmental Authority (CGA).
2. KEPA representatives.
3. The Project Proponent and the Environmental Consultancy Firm/Office.
4. Members of academia from universities and research institutes.
5. Representatives of communities and people affected by the project.
6. Non-governmental organizations (NGOs)
7. Members of the Media
8. Any other parties decided by KEPA.

The expected outcomes of the public consultation meeting should yield the following:

1. The provision of opinion and advice of the concerned parties in environmental and social aspects that should be addressed by the project proponent during the ESIA process
2. Additional issues and impacts that should be analyzed as part of the ESIA study
3. Additional concerned parties to be consulted during the ESIA process.

Review of the ESIA Scoping Report

Once received by KEPA, the P&EIAD will review the ESIA scoping report, the P&EIAD will convene a meeting which will be composed of SRP, the CGA, the Project Proponent and the Environmental Consultancy Firm/Office. The later will be requested to make a presentation on the content of the ESIA scoping report and

will address all the remarks and issues raised by the KEPA.

Following the review of the scoping report by KEPA, the Environmental Consultancy Firm/Office has to take into consideration the remarks of the meeting and P&EIAD comments and include them in the final ESIA Scoping Report and resubmit the final version to P&EIAD /KEPA for approval.

In case the ESIA scoping report is approved, the Environmental Consultancy Firm/ Office and the Project Proponent will be required to proceed with the preparation of the ESIA Study.

The Environment and Social Impact Assessment (ESIA) Phase

The purpose of the ESIA process is:

1. Identify and analyze potential environmental and social impacts and issues, both adverse and beneficial, associated the proposed project.
2. Identify measures to avoid, minimize, mitigate, or offset/compensate for adverse impacts on workers, affected communities, and the environment;
3. Design an Environmental Management Plan (EMP) to address the mitigation and monitoring of these adverse impacts, and their remedial measures as needed
4. Ensure that people and stakeholders affected by the project are kept informed about the ESIA process and are being consulted.
5. Identify specific self-monitoring reporting that the proponent would submit to the CGA and to KEPA for the construction and operation phases of the project.
6. Ensure that all project contracts made by the proponent with implementing companies include appropriate clauses to obligate the suppliers or contractors to comply with the associated elements of the EMP and submit also progress reports on the implantation of the EMP.
7. Disclose to the public the executive summary of the ESIA report (in Arabic) at the website of KEPA (http://www.epa.org.kw)

The outcome of the ESIA process is a comprehensive ESIA Study. This report should be concise and to the point and addressing relevant environmental and social issues. The body text should focus on investigation results, the conclusion, practical recommendations supported by summaries of the gathered information, and any approved references to explain and interpret such information. The detailed or unclear information is not appropriate in the body text, and should be presented in the annexes or in a separate document. The same thing applies to unpublished documents used in the ESIA study and they should be grouped in an annex.

The ESIA Study, which is further, elaborated in Annexes (G) and (H), must include the following:

1. Table of contents
2. Introduction
3. Non-technical executive summary in English and Arabic
4. Institutional, legal and administrative framework
5. Description of the proposed project
6. Analyses of project alternatives
7. Description of the baseline conditions/status of the surrounding environment of the project and its area of influence
8. Potential environmental and social impacts of the project
9. Mitigation measures
10. Environmental Management plan in accordance with Annex (H)
11. Self-reporting requirements during the construction and operational phases of the project
12. Public participation
13. Environmental standards, criteria and thresholds
14. Conclusion
15. Annexes – minutes of public participation meetings
16. Summary of project documents
17. Tables and information statements
18. List of relevant reports
19. List of scientific and non-scientific references used
20. List of the names of who prepared the ESIA Study (individuals and institutions)

The ESIA study will be presented in Arabic and on CD.

KEPA reserves the right to modify items required in this annex in accordance with environmental essentials that are applicable to standards and role of the project.

Public Consultation

The draft ESIA Study will be subject to public consultation. The Project Proponent

and the Environmental Consultancy Firm/Office bear the responsibility for organizing the public consultation in collaboration with the Competent Governmental Authority (CGA) but under the supervision of the P&EIAD /KEPA.

The methodology and parties to be involved in the public consultation (described in the Pubic Consultation section -F of the scoping phase) should be the same for the consultation of the ESIA Phase.

The following will be presented at the public consultation meeting:

1. An Executive Summary in Arabic of the ESIA Study which includes also the EMP
2. A power point presentation in Arabic of the results of the different sections of the ESIA Study
3. A table to include all aspects and issues that have been raised during the public consultation meetings at the scoping phase and how ESIA Study has addressed these aspects
4. The methodology that will be followed by the Project Proponent to ensure the continuity of the consultation process during the construction and operation phases of the project
5. The concrete actions and activities that the Proponent will use to improve the environmental qualities of the surroundings and the neighbouring communities
6. The self- monitoring program that the Project Proponent will establish to ensure that the adverse impacts will be mitigated and monitored
7. A summary of the issues and proposed solutions that were raised during the consultation meeting on the ESIA Study.

Review of the ESIA Study

The objectives of the review is to verify whether the ESIA Study meets the requirements of the scoping report, and thereby contains sufficient information to enable KEPA to make an informed decision on the acceptance of the ESIA Study.

Procedures

The final draft of the ESIA Study will be reviewed using the review check list provided in Annex (E) within 60 working days from the receipt of the ESIA report and all information needed .

The result of the reviewing process would be one of the following three recommendations:

i. Approval of the ESIA Study: In this case KEPA will issue the «Environment Permit» to the Competent Governmental Authority (CGA) following payment of

the Administration Fees.

ii. ESIA Study requires modifications: In this case, KEPA will inform in writing the CGA and the Environmental Consultancy Firm of the additional information/ work (that were missing from the agreed scoping report). KEPA could also convene a meeting with the Project Proponent to present the ESIA report and share their comments. The Project Proponent must provide the additional information, work or analysis required for the resubmission and review of the review team.

iii. Disapproval of the ESIA Study: In this case, KEPA will communicate in writing the substantive justification that lead to the rejection of the ESIA Study.

Issuing the Environment Permit

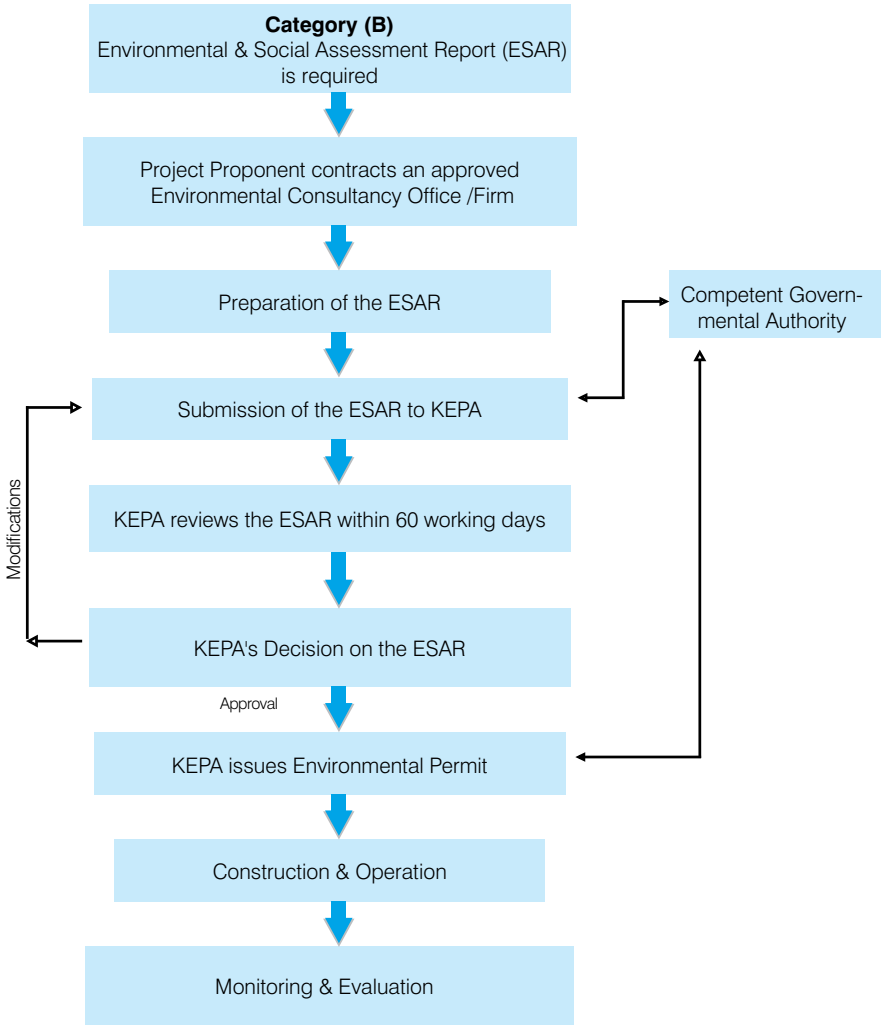
The Environmental Consultancy Office will prepare the Environment Permit for the approval of the KEPA and send it to the CGA following the payment of the administration fees.

Guidelines for Projects under Category (B)

(Projects which require the submission of an Environmental & Social Assessment Report, ESAR)

Whenever a project is classified in Category B (as identified in Annex B-2), an Environment and Social Assessment Report (ESAR) is only required. Typically, an ESAR is a relatively lower-cost analysis in comparison with Category A projects. ESAR makes use of information already available and is carried out using EIA procedures and methods, which are scaled to purpose. The ESA process is summarized in Figure (3) below:

Figure (3): The ESA Process for Category B Projects



The Environmental & Social Assessment (ESA) Process:

The ESA report (ESAR) should be limited to following elements:

1. The institutional and legal framework should be briefly described and focus primarily on the legal and institutional aspects related to the project
2. A formal scoping report is not required
3. Baseline data should be limited only to the necessary pollution parameters which significantly affect the environment within the project. This can be done through a survey on the site to obtain current environmental information
4. Key environmental issues can be identified by a rapid exercise, based on consultation with local people and agencies.
5. Analysis of alternatives will be limited to technical alternatives

An ESAR is therefore a simplified report which will:

1. describes the project and the environmental surroundings;
2. considers technical alternatives to improve the environmental benefits;
3. addresses the concerns of the local community;
4. identifies the potential environmental impacts;
5. identifies measures to mitigate adverse impacts; and
6. describes, as necessary, environmental monitoring and management plans.

Responsibilities

The responsibilities for preparing and reviewing the above documentation are as follows

KEPA will be responsible for:

- Conduct the project screening process
- Conducting field visit to the project site
- Review of the draft ESAR
- Issuance of the Environmental Permit
- Review of the self- monitoring report for Construction and Operation
- Supervision of the Environment Permit

The Project Proponent: will be responsible for:

- Hiring the services of an Environmental Consultancy Office/Firm acceptable to P&EIAD

- Submitting the self -monitoring report for approval by KEPA.
- Payment of the administrative fees
- Implementing the Environmental Permit

The Competent Governmental Authority (CGA): is a public department or a public institutions will have the responsibility of:

- Reviewing and Submitting the Project Screening Form prepared by the Project Proponent before it being submitted to KEPA.
- Issue , deliver and renew the license for construction and operation on the basis of the Environmental Permit
- Monitor the implementation of the Environmental Permit during project construction and operation
- Issue the necessary administrative warning and execute court orders concerning violations by the proponent of the environmental permit and/or closure of the plant

The Environmental Consultancy Office/Firm: will have the responsibility for:

- Act as the coordinator between the Project Proponent and KEPA during all stages of the preparation of the ESAR.
- Prepare the ESAR.
- prepare the self- monitoring report for Construction and Operation
- Prepare and fill the form of the Environmental Permit for approval by KEPA

Preparation of the ESA Report

After that the Project Proponent contracting an Environmental Consultancy Office/Firm approved by KEPA, the Consultant will prepare the ESA report within the work frame agreed, and whose content is summarized below and explained in Annex(I) will be less extensive than the ESIA report.

The ESA report will include:

1. A non- technical executive summary in English and Arabic
2. A short description of the project
3. A concise description of the institutional and legal framework
4. Analysis of the technical alternatives
5. Identification of Key Environmental and Social Issues
6. Analysis (qualitatively and semi quantitatively) of the environment and social impacts

7. An Environment Management Plan (EMP)
8. Conclusion

The ESA Report should be submitted in Arabic and on CD.

Review of the ESA report

The objective of the review is to verify whether the ESA report meets the requirements of the KEPA or not and thereby contains sufficient information to enable KEPA to make an informed decision on the acceptance of the ESA report.

Procedures:

The final draft ESA Report will be reviewed and evaluated (using the review checklist provided in (Annex J) within 60 working days from the receipt of the ESA report and all information needed.

Three possible recommendations could be provided:

i. Approval of the ESA Report: In this case KEPA will issue the «Environment Permit» to the Competent Governmental Authority (CGA) following payment of the administration fees.

ii. ESA Report requires modifications: In this case, KEPA will inform in writing the CGA and the Environmental Consultancy Firm of the additional information/ work. KEPA could also convene a meeting with the Project Proponent to present the ESA Report and share their comments. The Project Proponent must provide the additional information, work or analysis required for the resubmission and review of the review team.

iii. Disapproval of the ESA Report: In this case, KEPA will communicate in writing the substantive justification that lead to the rejection of the ESA Report.

Issuing the Environment Permit

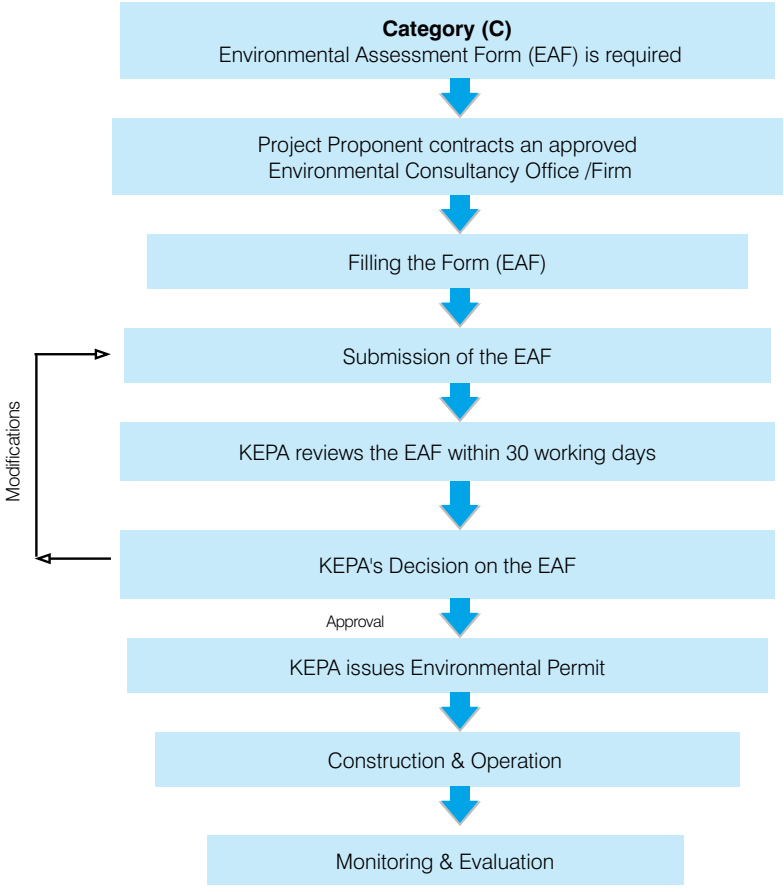
The Environmental Consultancy Office will prepare the Environment Permit for the approval of the KEPA and send it to the CGA following the payment of the administration fees.

Guidelines for Projects/Activities falling in Category «C»

(Projects which require only the submission of an Environment Assessment Form EAF)

Category «C» includes projects of minimum environmental impacts, and therefore, such projects or activities require only the submission of an Environmental Assessment Form (EAF) which should be filled up by the Environmental Consultancy Firm/Office that would be contracted by the project/activity proponent. The EAF is to be submitted to KEPA for reviewing within 30 working days from the date of submission. Annex (B-3) lists projects and activities which fall under Category «C». Figure 4 below illustrates the environmental assessment steps for projects and activities under Category «C».

Figure (4): The environmental assessment process for projects/activities under Category «C»



As for industrial crafts and workshops, KEPA›s office in the Integrated Services Centre at the Public Authority of Industry should be consulted to learn about the terms and conditions, to obtain the Environmental Assessment Form (EAF) and to fill it and submit the EAF. KEPA will review the EAF and issues the Environmental Permit following payment of the administrative fees.

The Environmental Permit

The "Environmental Permit" is viewed as an integral part of the ESIA Study, the ESA Report or the Environmental Assessment Form for controlling projects and activities that potentially cause pollution and significant environmental impacts. It allows and regulates an enterprise discharge of air, and water pollutants. It is therefore a tool to be used by KEPA for pollution control and management for defining legally binding requirements to protect human health and environment.

An Environment Permit should be based on the following principles:

- **Transparency of the system:** The Project Proponent applying for the environmental permit should know in advance what is required to get a permit and on what basis the decision of granting a permit is made. This requires clear guidelines from KEPA, a predictable decision making and a consultation with stakeholders.
- **Enforceability of the system:** The environment permit should be made enforceable. It should include clear and specific requirements that apply to the facility, the measures that the facility to comply with the requirements, the methods that the facility will use to ensure compliance and to document compliance.

Procedures: The procedures to be proposed to KEPA for issuing an environment permit involves the following stages:

1. Submission by the Environmental Consultancy Office/Firm of a form covering the description of the activities, sources of pollution, identification of the related potential environmental and social impacts, proposed monitoring procedures and emissions control techniques. All these information can be extracted from the ESIA and ESA. A proposed format is provided in Annex (L).
2. Analysis of the proposed project and its impacts – in case of significant environmental impacts, on the basis of the ESIA Study for Category "A" projects or ESA Report for Category "B" projects or the EAF for Category "C" projects. The mitigating measures and monitoring and institutional procedures should be taken from the environmental management plan (EMP).
3. The Environmental Permit covers both phases; the construction phase and the operation phase.
4. The environmental permit is issued with technical conditions which require regular reporting regarding emissions and notification of unusual events like discharge, or accidents.
5. Monitoring and periodic renewal of the environmental permit.

6. KEPA should state the period of validity of the environment permit according to the peculiarities of the project and to the monitoring procedures adopted. KEPA reserve the right of reviewing an existing permit at any time, especially if important new information comes to light.

ANNEXES

Annex (A): Project Screening Application Form

In considering whether a project requires ESIA, some information about the project will be required. The types of information required are listed below. Where a formal screening decision is made by the KEPA, the «Project Proponent» may be required to provide all of the information listed below to KEPA.

1 - Name of the project:
2 - Project Owner (Proponent): Name: Address: Tel number: Fax: Email:
3 - Competent Governmental Authority (CGA) Name: Address: Tel number: Fax: Email:

Note: the Environment Public Authority may request more information and other documents as per the nature of the project.

4 - Project Sector :

• Chemical Industries	• Irrigation, Agriculture & Animal Husbandry
• Oil & Gas	• Water Supply
• Engineering & Construction Materials	• Urban Development
• Food & Agro-Industries	• Waste Management
• Energy	• Tourism and Entertainment
• Large & Medium Infrastructure Projects	• Others: (Please specify)

5 - Nature of the project

New Project	Existing project or holder of a permit or approved
	• Modification
	• Addition of production line
	• Expansion
	• Rehabilitation
	• Closure

6 - Estimated cost of the project:

Total cost of the project (KD) :
Construction cost (KD):
Operation & maintenance cost (KD):

7 - Project time schedule

	Expected date of commencement	Expected end date
Planning and designs		
Construction		
Operation& maintenance		

8 - Characteristics of the Project

Brief description of the proposed project.
Maximum production capacity and total project area.
Map showing project location – (preferably Google maps + x,y coordinates + nearby areas)

Other documents attached
(To be filled by the Project Proponent)

Annex (B)
Projects Screening Lists

Annex (B-1)

Category (A): Projects which require a Comprehensive Environmental and Social Impacts Assessment Study (ESIAS)

ACTIVITY	THRESHOLDS
CHEMICAL INDUSTRIES	
1. Leather tanneries	All cases
2. Spray & Coatings (plastic/metal)	Project area > 10,000 m^2
3. Manufacturing of chemical fertilizers	All cases
4. Large-scale factories involved in surface treatment, galvanization or electroplating of iron, steel or non-ferrous metals	All cases
5. Manufacturing of pesticides or formulation, or transportation or hazardous /and or toxic materials	All cases
6. Aluminium manufacturing plants (from aluminium ores and from melting scraped aluminium)	All cases
7. Lead smelters	All cases
8. Manufacturing of medicines & pharmaceutical products	All cases
9. Artificial sponge manufacturing plans (from basic materials)	All cases
10. Manufacturing plants for the synthesis of petrochemicals, such as: Alkenes (ethylene, ethylene, propylene, butylene); polymers (polyethylene, polypropylene, polystyrene, polyvinyl chloride); benzene, ethyl-benzene, alkyl-benzenes; styrene , acetylene, formaldehydes, alcohols, glycerides, and other petrochemical industries.	All cases
11. Manufacturing of soap and chemical detergents from basic chemicals (including saponification and sulfonation processes)	All cases
12. Coal/petroleum coke manufacturing & processing plants	All cases

ACTIVITY	THRESHOLDS
13. Alkali chlor manufacturing plants and derivatives (caustic soda, chlorine gas, sodium hypochlorite, calcium hypochlorite, sodium chlorate, etc...)	All cases
14. Halogen organic compounds manufacture (including organic-chlorines)	All cases
15. Production of industrial gases	All cases
16. Tires, rubber and plastic industry	All cases
17. Manufacturing, refining and treatment of lubricating oils and grease	All cases
18. Paints and varnishes production	All cases
19. Manufacturing of organic solvents (e.g. White Spirit, acetone and others)	All cases
20. Paper mills for the manufacturing of pulp from cellulose and recycled papers (for the production of paper rolls and cardboard)	All cases
21. Production of basic chemicals (e.g. inorganic acids such as sulphuric acid, nitric acid, hydrochloric acid, etc...)	All cases
22. Steel and ion manufacturing (from ores and recycled metals)	All cases
23. Glass & glass wool manufacture	All cases
OIL & GAS	
24. Crude oil and natural gas refineries and renovation of refineries	All cases
25. Oil and gas extraction platforms	All cases
26. Tank farms for the storage of crude oils, gas, petroleum derivatives and petrochemical products	storage capacity > 20,000 tonnes
27. Storage and transportation of liquefied natural gas (LNG), liquefied petroleum gases (LNGs) and dangerous chemicals	All cases
28. Construction of on-shore pipelines (outside oil fields) for the transport of oil and gas	diameter > 1 m and length > 20 km

ACTIVITY	THRESHOLDS
29. Construction of off-shore pipeline for the transport of oil and gas	All cases
30. Enhance oil and gas recovery for increasing production	All cases
31. Oil export facilities (e.g. off-shore pipelines, berth, artificial islands, platforms, bunkers, etc..)	All cases
32. Oil and gas production on- and offshore	All cases
33. Ballast water treatment facilities	all cases
34. Drilling for off-shore and on-shore development and/or production of petroleum and gas fields	All cases
35. Natural gas & sour gas processing plants and treatment units for water accompanying oil	All cases
36. Surface industrial installations for the production of oil and natural gas (e.g. gathering stations)	All cases
ENGINEERING AND CONSTRUCTION MATERIALS	
37. Manufacture of cement, gypsum and ceramics (from raw materials)	All cases
38. Quarries for sand and gravels	All cases
39. Smelting, pouring or refining of ferrous and non-ferrous metals	All cases
40. Manufacturing of reinforcement ion, ion bars, ion sheets and ion pipes	All cases
41. Manufacturing of heavy mechanical equipment, heaters, boilers, ovens, refrigerators, air-conditioning	production site area > 10,000 m^2
42. Electrical motors, generators manufacture	production site area > 10,000 m^2
43. Batteries manufacturing plants and used batteries recycling plants	All cases
44. Plants for manufacturing and recycling mobile phone batteries	All cases
45. Shipyards for building and repair of large ships	length along waterside > 100 m
46. Production of coachwork for motor vehicles and trailers	All cases

ACTIVITY	THRESHOLDS
FOOD AND AGRO-INDUSTRY	
47. Large dairy factories and the manufacturing of milk products (milk, cheese, yogurt, ice-cream)	Area > 5,000 m^2
48. Wool production (including washing, bleaching, degreasing and dyeing)	All cases
49. Manufacturing of vegetable oils	All cases
50. Manufacturing of sugar	All cases
51. Manufacturing of table salt	All cases
ENERGY	
52. Thermal power plants/desalination plants	All cases
53. High-voltage transfer stations and power transmission lines	Voltage equator > 240 KV
54. Nuclear power plants	All cases
55. Renewable energy plants (solar/wind)	production > 20 MW
LARGE INFRASTRUCTURE	
56. Airports construction and expansion of airports	All cases
57. Ports and large-scale expansion	All cases
58. Coastal projects: Construction/rehabilitation of coastal structures (including; harbours, marinas, platforms, artificial islands, development of Kuwait's islands, markets, shopping malls, marine clubs, water canals and channels)	All cases with dredging and/or sand and rock filling
59. Major roads and highways	All cases
60. Railways and railways facilities	length > 10 km
61. Bridges (inland and over sea)	All cases
62. Cleaning work of main water ways (i.e., water intake for desalination plants and harbours)	All cases

ACTIVITY	THRESHOLDS
IRRIGATION, AGRICULTURE AND LIVESTOCKS PROJECTS	
63. Large-scale aquaculture, mar culture and industrial fisheries	Production more than 250 tonnes / year
64. Agricultural areas and greenery projects	Area > 5 km^2
65. Protected area and national reserves	All cases
66. Central slaughtering houses	All cases
67. Large-scale animal husbandry (cattle, horses, sheeps, others)	Project area > 50,000 m^2
WATER SUPPLY PROJECTS	
68. Water mixing and pumping plants	Production > 1.5 million m^3 /year
69. Ground water wells	Production > 1 million m^3 / year
70. Artificial recharge of groundwater with treated waste water	All cases
71. Water supply network (new or replacement)	Area > 10 km^2
URBAN DEVELOPMENT PROJECTS	
72. Regional/urban development master plans	All cases
73. Designation of industrial zones	All cases
74. Construction of new residential areas (new cities, worker's cities)	All cases
75. Expansion of residential areas	> 200 housing units
76. Construction of hospitals	More than 100 beds
77. Construction of new university campus and research centres	All cases
78. Large administrative complexes, shopping malls and exhibition centres	Total area > 50,000 m^2
79. Whole sale markets (meat & vegetables)	Total area > 50,000 m^2

ACTIVITY	THRESHOLDS
WASTE MANAGEMENT PROJECTS	
80. Waste landfills	All cases
81. Sanitation master plans (wastewater collection system)	All cases
82. Municipal solid (and semi-solid) waste segregation, recycling & treatment plants	All cases
83. Municipal wastewater treatment plants	All cases
84. Industrial wastewater treatment plants	All cases
85. Medical and hazardous waste incineration plants	All cases
86. Solid wastes incineration plants (Waste to Energy Plants,)	All cases
87. Hazardous waste treatment and storage facilities	All cases
TOURISM & ENTERTAINMENT PROJECTS	
88. Coastal hotels, tourism centres and resorts	All cases
89. Entertainment & amusement parks	All cases
90. Sport stadium & villages	All cases
91. Animal zoos	All cases

Annex (B-2)

Category (B): Projects which require an Environmental and Social Assessment Report (ESAR)

ACTIVITY	Thresholds
CHEMICAL INDUSTRIES	
92. Production of paper and cartoon boards (products only- doesn't include manufacturing of paper pulp)	All cases
93. Spray & coating (plastic/metal)	Project area less than < 10,000 m^2
94. Printing for magazines, newspapers, books and for can and tin products	All cases
95. Packing and packaging of liquid and solid chemicals and products (such as: washing powders, detergents and cleaning liquids)	All cases
96. Cosmetic factories (tooth paste, cologne, shampoo, perfumes, beauty products, etc.)	All cases
97. Factories and workshops for metal surface treatment and electroplating	All cases
98. Plants for mixing and packing fertilizers (without manufacturing)	All cases
99. Medium- and large factories for plastic shaping/ plastic injection/ plastic pipes/ packaging plastic wires/ plastic crushing/ manufacturing elastics materials/ CDs	All cases
100. Warehouses for the storage of chemicals & flammable materials	All cases
101. Carpets factories	All cases
102. Textile and clothes factories	Total area = 1,000 m^2 and above
103. Factories for the manufacturing of sponge products	All cases

	ACTIVITY	Thresholds
	OIL & GAS	
104.	Exploratory surveys (geological/geophysical), situated offshore or onshore for petroleum and gas	All cases
105.	Exploratory drilling not including development for off-shore and on-shore petroleum and gas	All cases
106.	Tank farms for the storage of crude oils, gas, petroleum derivatives and petrochemical products	storage capacity < 20,000 tonnes
107.	Construction of on-shore pipelines	Length < 20 km
	ENGINEERING AND CONSTRUCTION MATERIALS	
108.	Marble and granite cutting, polishing and finishing factories	All cases
109.	Plants for manufacturing bricks, plasters, gypsum and cements products	All cases
110.	Plants carrying out asphalt mixing and producing construction and road paving materials and reinforced concrete production	All cases
111.	Pottery and china factories	All cases
112.	Melting, pouring or refining of ferrous and non-ferrous metals	All cases
113.	Mechanical equipment, heaters, boilers, refrigerators, ovens, air-conditioners	production site less than 10,000 m^2
114.	Manufacturer of electrical motors, electrical generators and electrical appliances	production site less than 10,000 m^2
115.	Stations for distributing petroleum derivatives	All cases
116.	Medium and large wood manufacturing plants, MDF and artificial wood	All cases
117.	Manufacturing wooden and metallic products (such as windows, doors, accessories, furniture, desks kitchen ware)	All cases
118.	Workshops involved in surface metallic treatment or electroplating of iron, steel or non-ferrous metals	All cases
119.	Manufacturing of light bulbs and neon lamps	All cases

ACTIVITY		Thresholds
FOOD AND AGRO-INDUSTRY		
120.	Processing and packaging of oils and fats from animal or vegetable and the production of protein fodders	All cases
121.	Factories for the production of canned food, vegetables and fruits	All cases
122.	Confectionary and pastry industry	All cases
123.	Food processing factories (meat, fish and chicken meals)	All cases
124.	Dairy factories and the manufacturing of milk products (milk, cheese, yogurt, ice-cream)	production less than < 5000 m^2
125.	Factories for the production of gaseous drinks, juices, and bottled water.	All cases
126.	Wheat mills	All cases
ENERGY		
127.	High voltage power transmission lines (in urban areas)	Voltage equator less than < 240 KV
128.	Renewable energy plants (solar/wind)	Production capacity less than < 20 MW
MEDIUM- SIZE INFRASTRUCTURE PROJECTS		
129.	Renovation of Airports	All cases
130.	Steel shipyards, dry-docks, floating docks and ship maintenance	All cases
131.	Coastal structure	All cases without dredging
132.	Construction of internal roads	Length > 1 km
133.	Railways	Length smaller than < 10 km
IRRIGATION, AGRICULTURE AND LIVESTOCKS PROJECTS		
134.	Groundwater-fed irrigation projects	Irrigated area more than 100,000 m^2
135.	Medium-scale aquaculture, Mari culture and industrial fisheries	production less than 250 tonnes/year
136.	greenery projects	Land area less than 5 km^2

ACTIVITY		Thresholds
137.	Medium-scale animal husbandry (cattle, horses, sheep, other)	capacity less than < 100,000 kg livestock / year
138.	Poultry farms and slaughter houses	All cases
139.	cleanings of intestines and remaining parts of animals	
140.	Veterinary hospitals	All cases
141.	Factories for leather products (without tanning)	All cases
WATER SUPPLY PROJECTS		
142.	Water mixing & pumping plants	Production less than < 1.5 million m^3 /year
143.	Ground water wells	Production less than < 1 million m^3 / year
144.	Deep drilling for groundwater (production)	Depth greater than 1 km
145.	Water reservoirs	Capacity more than > 3000 m^3
146.	Compact water desalination units/plants	Less than 10,000 m^3/ year
147.	Drilling of shallow wells	more than 30 meters
148.	Water supply networks (new or replacement)	Area less than 10 km^2
149.	Storm water networks and emergency outlets	All cases
URBAN DEVELOPMENT PROJECTS		
150.	Construction/expansion of residential areas	Less than 200 housing units
151.	Construction of medium size hospitals	Less than 100 beds
152.	Temporary labour camps	More than 200 workers
153.	Small wastewater treatment plants/units	Capacity more than > 500 inhabitants
154.	Administrative complexes, shopping malls and exhibition centres	Total area 10,00 - 50,000 m^2
155.	Building of hotels (outside coastal zones)	More than 200 rooms
156.	Meat and vegetable markets	Total area 10,000 – 50,000 m^2

Annex (B-3)

Category (C): Projects and activities of minimum environmental impacts which requires only the submission of an Environmental Assessment Form (EAF) and the Environmental Permit is issued under the conditions set by KEPA

157.	Meat and vegetable markets (Total area less than < 10,000 m^2)
158.	Administrative complexes, shopping malls and exhibition centres (Total area less than < 10,000 m2)
159.	Car parks
160.	Bakeries and rotating ovens
161.	Workshops for the dairies production and dairy products
162.	Workshops for cutting and forming of plastic; including: plastic cutting and welding/ readymade rolls cutting to manufacture plastic bags, cutting and forming of windows from PVC and UPVC (all operations do not include plastic manufacturing)
163.	Workshops for cutting and forming of metals; including: iron working/ smith workshops/ metals turning and lathing workshops/ metallic sheets formation workshops/ metals formation by cold rolling and knocking, treated metal sheets for decoration works, water heaters, aluminium roof, metal boxes, others (all operations do not include metal melting or smelting processes)
164.	Electrical and acetylene workshops for welding metals
165.	Glass working shops/ glass cutting shops / crystal polishing shops
166.	Mirrors plating shops
167.	Marble and cement decoration workshops
168.	Shops of manufacturing and assembly of umbrellas and sunshades
169.	Manual painting workshops (without using spray guns)
170.	Offset printing and packaging shops
171.	Ink cartridge refilling and packaging shops
172.	Medical and health care centres
173.	Rehabilitation of the wastewater network
174.	Production of animal fodders
175.	Food stuff storage warehouses (dry and cooled rooms)

176.	Warehouses used for the storage of non-chemical materials and various materials (such as; furniture, spare parts, construction materials, wood and others)
177.	Ice manufacturing
178.	Shops for refilling of gas cylinders
179.	Shops for gypsum boards moulding and coating
180.	Shops for the production of perfumes and incense
181.	Ready-made concrete mixers
182.	Mechanical and manual carpentry workshops

Annex (B-4)

Category (D): Crafts and activities that do not require an Environmental Permit

183.	Shops for production and packaging of food stuff, meat and vegetables
184.	Central catering and food preparation facilities
185.	Shops for roasting, grinding and packaging of coffee beans, nuts and grains
186.	Shops of chopping and packaging of dates and production of molasses
187.	Shops for production of ice cream
188.	Shops for the manufacturing of sweets, patisserie, pastas, biscuits, chocolates and candies
189.	Shops for the production of drinks, juices, and liquids
190.	Shops for textile, garments, upholstery and leather products
191.	Shops of handmade manufacturing (musical instruments and bamboo products, and others)
192.	Gravure and zincography workshops
193.	Shops for all types of paper and cartoon products
194.	Poultry and domestic birds shops (including slaughtering, preparation and selling)
195.	Shops for henna and perfumes filling and packaging
196.	Shops for paints mixing (manually or computerized)
197.	Photography shops including developing and printing
198.	Repair workshops for cars and equipments
199.	Workshops for the production of advertisement panels and boards (neon, plastics, various type)
200.	Shops for the assembly of electrical components and appliances
201.	Fire stations and fire fighting
202.	Security fencing
203.	Schools and worship houses
204.	Fishing nets manufacturing
205.	Production of contact lenses, coloured lenses and dentures
206.	Shops for carpets manufacturing and wool treatment

207.	Replacement work or maintenance of secondary units (boilers, condensers, chillers, valves, pumps, control systems)
208.	Shops for the production of sand powder
209.	Shops for car tires repair.
210.	Washing and dry cleaning shops for all textiles and carpets
211.	Workshops for the production of gold, silver, jewelleries and accessories
212.	Medical clinics and laboratories

Important Notice: the P&EIA Department at KEPA reserves the right to reconsider the classification of projects and activities falling under Category (B) or Category (C) and to classify it again under Category (A) if found clear and significant environmental impacts or if the project/activity were to be cited within a sensitive area (sensitive areas are listed in Annex C).

Annex (C): Environmentally and Socially Sensitive Areas

1. Areas classified, by virtue of laws or decrees, as specifically protected areas, or natural reserves, or natural forests or wetlands or important areas of birds or public gardens or natural scenery sites or touristic and historic sites and/or archaeological locations or holy places.
2. Kuwait bay area.
3. Areas that are home of endangered species (animal and plants).
4. Watersheds and catchment areas
5. Sea beaches, waterways, and groundwater wells fields
6. Vulnerable groups
7. Significant cultural heritage sites
8. Protected areas and natural reserves
9. Any areas identified by KEPA.

Annex (D): Site Selection Criteria

1. Project site must comply with urban plan or Kuwait Master Plan or industrial zone plan
2. Project site must not enter within the boundaries of protected areas and does not affect it in any way of pollution aspects.
3. No environmentally significant wetlands of important biodiversity or reproductive value are present within the potential area of the project site.
4. No known rare or endangered species' breeding areas or protected living areas are present within the site boundaries. If these criteria are not met, alternative habitats of comparable quality for relocation of the species would need to be available.
5. No major lines of electrical transmission or other infrastructure (i.e., gas, sewer, water lines) are crossing the facility development area, unless the operation would clearly cause no concern or rerouting is economically feasible.
6. Project site must be away at least (500 m) from the nearest artesian well and must obtain the necessary approval from the relevant governmental authorities (Ministry of Electricity and Water).
7. No significant seismic risk within the region of the project site which could cause destruction of berms, drains or other civil works, or require unnecessarily costly engineering measures.
8. Avoid siting within (1 km) of culturally sensitive sites where public acceptance might be unlikely and avoid access roads which would pass by such sites.
9. No siting within a floodplain subject to floods and, and if within areas subject to floods, must be amenable to an economic design which would eliminate the potential for washout by floods.
10. Testing of groundwater must be conducted in areas known to be affected by high concentration of soluble hydrogen sulphide (H2S) in groundwater, and therefore, groundwater must be treated before discharge if the concentration of soluble sulphide (S--) exceeds the allowable limit (0.5 mg/L).
11. Project must not be sited less than (100 m) from high ways and (300 m) from major intersections and roundabouts in order to minimize the impacts of noise and vehicles emissions.
12. Water desalination/power generation projects must not be sited less than (2Km) from the nearest residential area.
13. Projects for the production of liquefied gases and chlorine and warehouses

for the storage of compressed cylinders of dangerous liquefied gases must not be sited less than (2Km) from the nearest residential area.

14. Oil refineries and petrochemical projects must not be sited less than (3Km) from the nearest residential area.
15. Industrial areas of heavy industries and polluting industries must not be sited less than (2Km) from the nearest residential area.
16. Site selection of certain projects can be defined according to existing circumstances such as factories emitting dangerous pollutants (i.e., cement factories and waste incinerators) or emitting odorous gases and bacteria (i.e., wastewater treatment plants, slaughter houses and composting plants)
17. The nearest facility or residential complex should be away at least (30m) from the nearest fuel station and (20 m) from the nearest facility using open flames.
18. Buffer distances for each particular industry from the nearest residential area are defined on the basis of air pollution, noise, fires or explosions

Annex (E): Checklist for Reviewing the ESIA Study by KEPA

The following criteria will be used for evaluating the ESIA Study by KEPA

Grade	Criteria
(A) Excellent	The environmental information contains everything required for decision-making on the project. There are no gaps.
(B) Good	The environmental information contains most of the information required as far as it is relevant in the particular circumstances of this project; any gaps are relatively minor.
(C) Satisfactory	The information presented is not complete; there are significant omissions but in the context of the proposed project, these are not so great as to prevent a decision being made.
(D) Inadequate	Some of the information has been provided, but there are major omissions and weakness; in the context of the proposed project these must be addressed before a decision being made.
(E) Poor	The information required has not been provided or is far from complete, and, in the context of the proposed project, the omissions, gaps and information must be addressed before a decision being made.

Checklist for the reviewing of ESIA Study

Client acceptance of ESIA findings and recommendations		Applicable? (Y/N)	Grade
1	Has the ESIA Study been prepared by an approved Environmental Consultancy Office/ Firm of the required class?		
2	Has the Project Proponent explicitly endorsed the ESIA Study and its EMP?		
3	Has the Project Proponent submitted an official letter to KEPA?		

4	Has the Project Proponent provided KEPA with the contract being made with Environmental Consultancy Office/Firm and stating the date of the contract?		
5	Has the Project Proponent provided KEPA with the project site allocation letter from Kuwait Municipality/City Council?		

1 - Executive Summary

Non-technical summary		Applicable? (Y/N)	Grade
1	There is a non-technical summary of the main findings of the study		
2	The summary presents the main findings of the assessment and covers all the main issues raised in the information		
3	The summary avoids technical terms, lists of data and detailed explanations of scientific reasoning		
4	The summary indicates the confidence which can be placed in the results		
5	The summary contains a matrix or table presentation of the proposed Environmental Management Plan		

2 - Institutional, Legal, and Administrative Framework

Permitting and Applicability		Applicable? (Y/N)	Grade
1	Clearly describes the legal and administrative framework applicable to the nature, purpose and objectives of the project		
2	Clearly identifies and provides relevant and applicable standards and norms against which project performance will be measured		

3	Classifies the project in the context of national ESIA legislation or screening criteria, where applicable		
4	All the relevant international conventions are listed and their implications for the project, if any, are spelled out clearly		
5	Includes information relating to site clearance and point of issue. This may include clearance under local and national regulators and authorities.		

3 - Project Description

	Criterion	Applicable? (Y/N)	Grade
Principal features of the Project			
1	Explains the purpose(s) and objectives of the development		
2	Indicates the nature and status of the decision(s) for which the environmental information has been prepared		
3	Gives the estimated duration of the project construction phase and operational phase and describes the program within these phases		
4	Describes the proposed development, including its design or size and scale. Diagrams, plans or maps will usually be necessary for this purpose		
5	Indicates the physical presence or appearance of the completed projects/facilities within the receiving environment of the proposed project area		
6	Describes the methods of construction		

7	Describes the nature and methods of production or other types of activity involved in the operation of the project		
8	Describes any additional services (water, electricity, emergency services etc) or developments required as a consequence of the project		
9	Describes the project's potential for accidents, hazards and emergencies		
Land Requirements			
1	Defines the land area taken up by the project site and any associated arrangements, auxiliary facilities and landscaping areas required by the construction site(s), and shows their location clearly on a map. For a linear project, describes the land corridor, vertical and horizontal alignment and need for tunnelling and earthworks		
2	Describes the uses to which this land will be put, and demarcates the different land use areas		
3	Describes the reinstatement and after-use of land take during construction		
Project Inputs			
1	Describes the nature and quantities of materials needed during the construction and operation phases		
2	Estimates the number of workers and visitors entering the project site during both construction and operation		
3	Describes their access to the site and likely means of transport		

4	Indicates the means for transporting materials and products to and from the site during construction and operation, and the number of movements involved		
Residues and emissions			
1	Estimates the types and quantities of waste matter, energy, and other residue materials generated during construction and operation of the project, and rate at which these will be produced		
2	Indicates how these wastes and residue materials are expected to be handled and/or treated prior to release/disposal, and the routes and sites by which they will eventually be disposed of to the environment		
3	Identifies any special or hazardous wastes which will be produced, and describes the methods for their disposal as regards their likely main environmental impacts		
4	Indicates the methods by which the quantities of the waste and residuals were estimated. Acknowledges any uncertainty, and gives ranges or confidence limits where appropriate		

4 - Baseline Data

Description of the area occupied by and surrounding the project		Applicable? (Y/N)	Grade
1	Indicates the area expected to be significantly affected by the various aspects of the project with the aid of suitable maps. Explains the time over which these impacts are likely to occur		

2	Describes the land use(s) on the site and its surrounding areas		
3	Defines the affected environment broadly enough to include any potential significant effects occurring away from the immediate areas of construction and operation		
Baseline conditions			
1	Identifies and describes the components of the affected environment potentially affected by the project		
2	The methods used to investigate the affected environment are appropriate to the size and complexity of the assessment task. Uncertainty is indicated		
3	Predicts the likely future environmental conditions in the absence of the project. Identifies variability in natural systems and human use		
4	Uses existing technical data sources, including records and studies carried out for environmental establishments, authorities and research institutes		
5	Reviews local, regional, and national plans and policies, and other data collected as necessary to predict future environmental conditions		
6	Local, regional and national agencies holding information on baseline environmental conditions have been approached		

5 - Environmental Impacts

Impact identification		Applicable? (Y/N)	Grade
1	Considers direct and indirect/secondary effects of constructing, operating and maintenance and, where relevant, after-use or decommissioning of the project. Considers whether effects will arise as a result of 'consequential' development		

2	Investigates the above types of impacts in so far as they affect: human beings, flora, fauna, soil, water, air, climate, landscape, interactions between the above, material assets, cultural heritage		
3	If any of the above are not of concern in relation to the specific project and its location, this is clearly stated		
4	Identifies impacts using a systematic methodology such as project specific checklists, matrices, panels of experts, extensive consultations, etc. Describes the methods/approaches used and the rationale for using them		
5	The investigation of each type of impact is appropriate in its importance for the decision, avoiding unnecessary information and concentrating on the key issues		
6	Considers impacts which may not themselves be significant but which contribute incrementally to a significant impact		
7	Considers impacts which might arise from non-standard operating conditions, accidents and emergencies		
8	If the nature of the project is such that accidents are possible which might cause severe damage within the surrounding environment, an assessment of the probability and likely consequences of such events is carried out and the main findings reported		
Prediction and Evaluation of Impacts			
1	Describes impacts in terms of the nature and magnitude of the change occurring and the nature location, number, value, and sensitivity of the affected receptors		
2	Predicts the time scale over which the effects will occur, so that it is clear whether impacts are short, medium, or long term, temporary or permanent, reversible or irreversible		

3	Where possible, expresses impact predictions in quantitative terms. Qualitative descriptions, where necessary, are as fully defined as possible		
4	Defines the likelihood of impacts occurring, and the level of uncertainty attached to the results		
Methods and Data			
1	The methods used to predict the nature, size and scale of the main impacts are sufficient for the task, clearly described, and their sources clearly identified. Any gaps in the data are indicated and accounted for		
Evaluation of Impact Significance			
1	Discusses the significance of effects in terms of the impacts on the local community and on the protection of environmental resources		
2	Discusses the significance of effects taking into account the appropriate national and international standards or norms, where these are available		
3	Includes a clear indication of which impacts are significant and which are not		

6 - Analysis of Alternatives

Description of Alternatives		Applicable? (Y/N)	Grade
1	Alternatives are presented and compared		
2	The alternatives are realistic and genuine		
3	Gives reasons for selecting the proposed project, and the part environmental factors played in the selection		
4	Compares the alternatives' main environmental impacts clearly and objectively with those of the proposed project and with the likely future environmental conditions without the proposed project		

7 - Mitigation Procedures

	Mitigation of Alternatives	Applicable? (Y/N)	Grade
1	Describes the reasons for choosing the particular type of mitigation, and the other options available		
2	Considers the mitigation of all significant negative impacts and, where feasible, proposes specific mitigation measures to address each impact		
3	Explains the extent to which the chosen mitigation measures will be effective. If uncertain, this is made clear and data are introduced to justify the acceptance of any assumptions		
4	Indicates the significance of any impacts remaining after mitigation, and justifies why these impacts should not be mitigated		
5	Investigates and describes any adverse environmental effects of mitigation measures and alternatives		
6	Considers the potential for conflict between the benefits of the mitigation alternatives and their adverse impacts		

8 - Environmental Management Plan

	Commitment to mitigation and monitoring	Applicable? (Y/N)	Grade
1	Includes a complete Environmental Management Plan (EMP)		
2	Gives details of how the mitigation measures will be implemented and function over the time span for which they are necessary		
3	Proposes monitoring arrangements for all significant impacts, especially where uncertainty exists		
4	Includes a list of personnel responsible for the implementation of the EMP		
5	The scale of any proposed monitoring arrangements corresponds to the potential scale and significance of deviations from expected impacts		

9 - Public Consultation

	Criterion	Applicable? (Y/N)	Grade
1	There has been a genuine attempt to contact the public, relevant public agencies, relevant experts, and special interest groups where applicable. Lists the groups approached		
2	Relevant authorities and research institutes have been contacted. Lists the consulters		
3	Identifies valued environmental attributes on the basis of this consultation		
4	Identifies all project activities with significant impacts on valued environmental attributes. Identifies and selects key impacts for more intense investigation.Describes and justifies the scoping methods used		
5	The cost of EMP is calculated and presented in a schedule corresponding to the duration of the project; and that funding has been secured and institutional responsibilities and organization are clearly stated		
6	Includes a copy or summary of the main comments from consulters and the public, and measures taken to respond to these comments		

10 - Presentation and Layout

	Organization of information	Applicable? (Y/N)	Grade
1	There are chapter or section summaries outlining the main findings of each phase of the investigation		
2	Presents information so as to be comprehensible to the non-specialist. Uses maps, tables, graphical material, and other devices as appropriate. Avoids unnecessary technical or obscure language		
3	Avoids superfluous information		
4	Indicates any gaps in the required data and explains the means used to deal with them in the assessment		
5	The information is objective and does not lobby for a particular point of view. Adverse impacts are not disguised by euphemisms or platitudes		

Annex (F): Content of the Scoping Report

1. Introduction: This section defines the objective of the ESIA scoping report
2. Background information: This section includes:
   - A description of the project, its justification and relevance, its components and project costs, its timing in view of the phases of preparing, designing and implementing the project.
   - The boundaries of the areas as well as the physical, chemical, biological, social and economic environment in the project area covered by the study as well as its areas of influence including a detailed map
   - Relevant information about the Environmental Consultancy Office/Firm conducting the ESIA study, project stakeholders, and the target groups which will be affected positively or negatively by the project.
   - Any other projects planned or currently implemented in the same area
3. The institutional, legal and administrative framework summarizing the enforceable national and international laws, regulations, and standards governing the project, as well as the official departments concerned, at the local and national levels.
4. The analysis of project alternatives: preliminary description of alternatives studied during the preparation of the proposed project and listing other alternatives that can achieve the same objectives. The range of alternatives should consider "the no project" alternative. The impact of each alternative would include demand, inputs/ outputs, activity, location, process and technology, social attitudes, cost and benefit and should be compared against the base line environment to select a preferred alternative. A comparison table will reflect the different alternatives considered. This will be followed by the selected alternative and the justification for tis selection
5. Significant environmental issues that the project will create or affect the environment (positive and negative impacts), taking into consideration: type of the impact; its magnitude, nature, scope, short-term and long-term, cumulative, irreversibility, timing and duration; likelihood of occurrence; trans-boundary issues and global impacts.
6. Administrative and logistic arrangements: Assistance required by the Consultant to have the necessary permits and authorization, the coordinating among official departments, the CGA and public participation as well as the types of activities such as the public meeting for the scoping and the ESIA Study.

7. An Environment and Social Management Framework that will describe the procedures to be followed by the Environmental Consultancy Office/Firm in the identification and preparation of the environmental management plan which will consist of :
    - Mitigation measures for negative impacts
    - Monitoring measures and the monitoring parameters proposed
    - Institutional capacity required to implement the mitigating and monitoring measures to be included in the ESIA study.
8. Summary of the consultation meeting indicating (in the form of a table) the issues raised by the participants, and responses and actions taken.
9. Indication of the time-frame, costs and resources needed to carry out the ESIA study
    - The time and schedule estimated for the completion of the EIA study, which should include a definition of the environmental baseline, an analysis of alternatives, impact identification, impact evaluation and preparation of recommendations
    - A description and estimation of the resources required (in terms of budget, person-days) must be provided, including a break-down of costs

Annex (G): Contents of the ESIA Study

The ESIA report should include the following information:

1. Non-technical Executive Summary in Arabic and English
2. Table of Contents
3. Introduction
    - Objective and rationale of the project:
    - Definition of the project and the project owner
    - Brief description of the type, size and location of the project
    - Importance of the project to the country
    - The ESIA scoping, which include the person or the agency that prepared the study
4. Institutional, Legal and Administrative Frameworks:
    - Relevant Competent Governmental Authority (CGA)
    - Environmental legislation, other regulations related to the environment, the policy observed in the country
    - Environmental requirements for any of the parties participating in financing the project
    - Applicable environmental agreements or treaties the country have joined
5. Public Participation:
    - Relevant public authorities and experts
    - Non-governmental organizations (NGOs)
    - Target groups affected by the project
    - Research establishment and organizations
6. Description of the Proposed Project:
    - Type of the project
    - Location of the project: maps showing the project site and its impacts
    - Size of the project, including the related activities
    - Proposed program for construction and operation

7. Description of the surrounding environment of the project and the areas of influence that will be included as part of the ESIA study:

7.1 Physical and chemical environment:

- Topographical and geological aspects, and the impact of earthquakes and other hazards
- Study of surface and underground water
- Measuring sea and coasts
- Surround air quality, sources of air pollution
- Climate and weather service
- Noise

7.2 Biological environment:

- Vegetation and animal life
- Fish and marine living creatures
- Rare or endangered species
- Sensitive areas (forests, protected areas, natural parks, etc.)

7.3 Socio-economic environment:

- Demographics (population, social fabric, employment, income distribution, customs and traditions, people expectations etc)
- Development activities (infrastructure, industry, agriculture, institutions, tourism, recreation etc.)
- Land use
- Traffic
- Public health
- Historic and archaeological heritage
- Aesthetic values
- Culture and civilization values (customs and tradition, aspirations)

8. Potential environmental impact of the project:
   - Physical and chemical environments
   - Biological environment
   - Social and economic environment

9. Preliminary analysis of project alternatives:
    - Non establishment of the project
    - Alternative projects with same objectives
    - Same project with different technologies
    - Comparing various environmental and economic potentials

10. Environmental Management Plan (EMP):

(Please see Annex H for detailed information of the content of the EMP which is summarized below):

10.1 Negative impacts mitigation measures:

- Summary of significant environmental and social consequences
- Technical details of each mitigation measure (applicable to which impact, the conditions of their application, designs, detailed fittings and operational procedures)
- Potential environmental and social effects of these measures
- Cost of negative impacts mitigation program

10.2 Monitoring and control program:

- Specific technical detail of control means (control standards, control techniques, periodicity of the required control, control location, measurement procedures, keeping and analyzing information, and emergency measures)
- Reporting and report submission
- Detailed budget, acquisition program and the required supplies
- Cost of monitoring and control program

10.3 Institutional capacity development program:

- Detailed description of institutional procedures required for the above environmental measures (responsibility for implementing mitigation measures and control/follow up procedures etc.).
- Technical assistance programs
- Cost of institutional capacity development program

10.4 Self-monitoring report during the construction and operation phase

- Prior preparations for following up control and supervision
- Progress of the implementation of the EMP
- Reporting on the pollution levels as a result of the project

11. Conclusion:

Summary of the key results of the ESIA, the recommendations (referring to the draft EMP to be attached following Annex H) and the assessment of the residual impacts as well as the limitations of the ESIA and its key assumptions should be articulated

12. Annexes:

- Minutes of public participation
- Summary of project-related documents
- Tables and information statements
- List of related reports
- List of scientific and non-scientific references used
- List of the names of who prepared the ESIA study (individuals and agencies)

Note: KEPA has the right to modify items required in this annex in accordance with environmental essentials that are applicable to standards and role of the project.

Annex (H): Content of the Environmental Management Plan

As part of the ESIA process and the ESIA Study, the Environmental Management Plan (EMP) provides a critical link between measures to mitigate adverse impacts and the integration of such measures during the implementation and operation of projects. It summarizes the anticipated impacts of projects and provides details on the measures, responsibilities and scheduling to mitigate these impacts, costs of mitigation and monitoring and supervision.

Content of an EMP

1. **Summary of impacts:** Predicted adverse environmental impacts and their relationship to social impacts (and any uncertainties about their effects) for which mitigation is necessary should be identified and summarized.
2. **Description of mitigation measures:** Each measure should be briefly described in relation to the impact(s) and conditions under which it is required. These should be accompanied by, or referenced to, designs, development activities (including equipment descriptions) and operating procedures and implementation responsibilities. Public consultation should be clearly described and justified.
3. **Description of monitoring program:** The EMP identifies monitoring objectives and specifies the type of monitoring required; it also describes environmental performance indicators which provide linkages between impacts and mitigation measures identified in the ESA report - parameters to be measured, methods to be used, sampling location and frequency of measurements, detection limits (as appropriate) and definition of thresholds to signal the need for corrective actions. Monitoring and supervision arrangements should be agreed between KEPA and the Environmental Consultancy Office/Firm to ensure timely detection of conditions requiring remedial measures in keeping with good practice; furnish information and the progress and results of mitigation and institutional strengthening measures.
4. **For projects involving rehabilitation, upgrading, expansion, or privatization of existing facilities**, remediation of existing environmental problems may be more important than mitigation and monitoring of expected impacts. For such projects, the management plan focuses on cost-effective measures to remediate and manage these problems.
5. **Legal requirements and bidding and contract documents**: The incorporation of detailed mitigation, monitoring and supervision arrangements into legal conditions and covenants is essential. It is good practice to ensure that

implementation of major environmental requirements is linked to disbursement conditions. It is important to translate EMP requirements into bidding and contract documents to ensure that obligations are clearly communicated to contractors.

6. **Institutional arrangements**: Responsibilities for mitigation and monitoring should be defined along with arrangements for information flow, especially for coordination between agencies responsible for mitigation. This is especially important for projects requiring integration between sectors. In particular, the EMP specifies who is responsible for undertaking the mitigating and monitoring measures, e.g., for enforcement of remedial actions, monitoring of implementation, training, and reporting. For projects having significant environmental implications, it is particularly important that there be in the implementing ministry or agency an in-house environmental unit with professional staffing strong in expertise relevant to the project.
7. **Implementation schedule:** The timing, frequency and duration of mitigation measures and monitoring should be included in an implementation schedule, showing phasing and coordination with procedures in the overall project implementation /operation.
8. **Reporting**: Procedures for providing information on the progress and results of mitigation and monitoring measures should also be clearly stated. Recipients of such information should include those with responsibility for ensuring timely implementation of mitigation measures and for undertaking remedial actions. In addition, the structure, content and timing of reporting to KEPA should be designed to facilitate supervision.

Annex (I): Contents of the Environmental and Social Assessment Report (ESAR)

The Environmental and Social Assessment Report (ESAR) should include the following information (not necessarily in this order):

1. Non-Technical Executive Summary in English and Arabic.
2. Table of contents
3. Introduction: defining the project, the project owner, as well as a brief explanation of the type, size and location of the project.
4. Institutional, legal and administrative frameworks: an investigation of the enforceable regulations, principles, and standards observed by the environment at the local and national levels, laws governing the environment under which the project is included. The information should address specifying the official governmental department concerned.
5. Description of the proposed project: description of project components, the relevant maps according to the appropriate scale and photos, information of project location, comprehensive design, size, capacity, work program, services, the duration of operation, etc.
6. Description of the surrounding environment of the project: gathering and evaluation basic information of environmental characteristics of the study location (physical, chemical, biological, social and economic environment) taking into consideration any expected modifications before the commencement of the project or any likely changes in future.
7. Potential environmental and social impact of the project: identification, estimation, and assessment of all potential effects of the project on the environment (physical, chemical, biological, social and economic consequences) whether positive or negative, direct or indirect, cumulative over the short or long term, trans-boundary and global impacts as well as social impacts.
8. Environmental management plan (EMP): this paragraph summarizes a group of impact mitigation measures, monitoring and control tools, and institutional procedures taken during construction, operation, or decommissioning a project, with a view to eliminating or mitigating negative environmental effects to locally acceptable levels, if any, or to international standards. This paragraph should include the estimated cost of the environmental management plan. The EMP should be prepared in accordance with Annex (H)
9. Conclusion

10. Annexes:

- Summary of project documents.
- Tables and information statements
- List of scientific and non-scientific references used
- List of the names of who prepared the initial environmental examination report (individuals and institutions).

Note: KEPA has the right to modify items required in this annex in accordance with environmental essentials that are applicable to standards and role of the project.

Annex (J): Checklist for Reviewing the ESAR by KEPA

The following criteria will be used for evaluating the ESA report by KEPA

Grade	Criteria
(A) Excellent	The environmental information contains everything required for decision-making on the project. There are no gaps.
(B) Good	The environmental information contains most of the information required as far as it is relevant in the particular circumstances of this project; any gaps are relatively minor.
(C) Satisfactory	The information presented is not complete; there are significant omissions but in the context of the proposed project, these are not so great as to prevent a decision being made.
(D) Inadequate	Some of the information has been provided, but there are major omissions and weakness; in the context of the proposed project these must be addressed before a decision being made.
(E) Poor	The information required has not been provided or is far from complete, and, in the context of the proposed project, the omissions, gaps and information must be addressed before a decision being made.

Checklist for the reviewing of the Environmental and Social Assessment Report (ESAR)

Client acceptance of ESA findings and recommendations		Applicable? (Y/N)	Grade
1	Has the ESAR been prepared by an approved Environmental Consultancy Office/ Firm of the required class?		
2	Has the Project Proponent explicitly endorsed the ESAR and its EMP?		
3	Has the Project Proponent submitted an official letter to KEPA?		
4	Has the Project Proponent provided KEPA with the contract being made with Environmental Consultancy Office/Firm and stating the date of the contract?		
5	Has the Project Proponent provided KEPA with the project site allocation letter from Kuwait Municipality/City Council?		

1 - Executive Summary

Non-technical summary		Applicable? (Y/N)	Grade
1	There is a non-technical summary of the main findings of the study		
2	The summary presents the main findings of the assessment and covers all the main issues raised in the information		
3	The summary avoids technical terms, lists of data and detailed explanations of scientific reasoning		
4	The summary indicates the confidence which can be placed in the results		
5	The summary contains a matrix or table presentation of the proposed Environmental Management Plan		

2 - Institutional, Legal, and Administrative Framework

Permitting and Applicability		Applicable? (Y/N)	Grade
1	Clearly describes the legal and administrative framework applicable to the nature, purpose and objectives of the project		
2	Clearly identifies and provides relevant and applicable standards and norms against which project performance will be measured		

3 - Project Description

Criterion		Applicable? (Y/N)	Grade
Principal features of the Project			
1	Explains the purpose(s) and objectives of the development		
2	Indicates the nature and status of the decision(s) for which the environmental information has been prepared		

3	Gives the estimated duration of the project construction phase and operational phase and describes the program within these phases		
4	Describes the proposed development, including its design or size and scale. Diagrams, plans or maps will usually be necessary for this purpose		
5	Describes any additional services (water, electricity, emergency services etc) or developments required as a consequence of the project		
6	Describes the project's potential for accidents, hazards and emergencies		
Land Requirements			
1	Defines the land area taken up by the project site and any associated arrangements, auxiliary facilities and landscaping areas required by the construction site(s), and shows their location clearly on a map. For a linear project, describes the land corridor, vertical and horizontal alignment and need for tunnelling and earthworks		
2	Describes the uses to which this land will be put, and demarcates the different land use areas		
Project Inputs			
1	Estimates the number of workers and visitors entering the project site during both construction and operation		
2	Indicates the means for transporting materials and products to and from the site during construction and operation, and the number of movements involved		
Residues and emissions			
1	Estimates the types and quantities of waste matter, energy, and other residue materials generated during construction and operation of the project, and rate at which these will be produced		

2	Indicates how these wastes and residue materials are expected to be handled and/or treated prior to release/disposal, and the routes and sites by which they will eventually be disposed of to the environment		

4 - Baseline Data

Description of the area occupied by and surrounding the project		Applicable? (Y/N)	Grade
1	Describes the land use(s) on the site and its surrounding areas		
2	Defines the affected environment broadly enough to include any potential significant effects occurring away from the immediate areas of construction and operation		
Baseline conditions			
1	Identifies and describes the components of the affected environment potentially affected by the project		
2	Uses existing technical data sources, including records and studies carried out for environmental establishments, authorities and research institutes		
3	Local, regional and national agencies holding information on baseline environmental conditions have been approached		

5 - Environmental Impacts

Impact identification		Applicable? (Y/N)	Grade
1	Considers direct and indirect/secondary effects of constructing, operating and maintenance and, where relevant, after-use or decommissioning of the project.		
2	Identifies impacts using a systematic methodology such as project specific checklists, matrices, panels of experts, extensive consultations, etc. Describes the methods/approaches used and the rationale for using them		

Prediction and Evaluation of Impacts			
1	Describes impacts in terms of the nature and magnitude of the change occurring and the nature location, number, value, and sensitivity of the affected receptors		
2	Where possible, expresses impact predictions in quantitative terms. Qualitative descriptions, where necessary, are as fully defined as possible		
Methods and Data			
1	The methods used to predict the nature, size and scale of the main impacts are sufficient for the task, clearly described, and their sources clearly identified. Any gaps in the data are indicated and accounted for		
Evaluation of Impact Significance			
1	Discusses the significance of effects in terms of the impacts on the local community and on the protection of environmental resources		
2	Discusses the significance of effects taking into account the appropriate national and international standards or norms, where these are available		
3	Includes a clear indication of which impacts are significant and which are not		

6 - Analysis of Alternatives

	Description of Alternatives	Applicable? (Y/N)	Grade
1	Alternatives are presented and compared		
2	Gives reasons for selecting the proposed project, and the part environmental factors played in the selection		

7 - Mitigation Procedures

Mitigation of Alternatives		Applicable? (Y/N)	Grade
1	Considers the mitigation of all significant negative impacts and, where feasible, proposes specific mitigation measures to address each impact		

8 - Environmental Management Plan

Commitment to mitigation and monitoring		Applicable? (Y/N)	Grade
1	Includes a complete Environmental Management Plan (EMP)		
2	Gives details of how the mitigation measures will be implemented and function over the time span for which they are necessary		
3	Proposes monitoring arrangements for all significant impacts, especially where uncertainty exists		
4	Includes a list of personnel responsible for the implementation of the EMP		
5	The scale of any proposed monitoring arrangements corresponds to the potential scale and significance of deviations from expected impacts		

9 - Presentation and Layout

Organization of information		Applicable? (Y/N)	Grade
1	There are chapter or section summaries outlining the main findings of each phase of the investigation		
2	Presents information so as to be comprehensible to the non-specialist. Uses maps, tables, graphical material, and other devices as appropriate. Avoids unnecessary technical or obscure language		

Annex (K): List of Available Forms at the P&EIAD in KEPA

The following standard forms for designated workshops and crafts are available from the Planning and Environmental Impact Assessment Department (P&EIAD) at KEPA:

1. Industrial crafts
2. Warehouses and storage facilities
3. Medical centres
4. Car parks
5. Administrative buildings ,Main road stations, Museums, theatres and exhibition centres
6. Replacement of sewage / industrial wastewater pipelines

These forms can be downloaded from the website of the Kuwait Environment public Authority (www.epa.org.kw). Printed copies are also available from the Planning and Environmental Impact Assessment Department (P&EIAD) at KEPA.

Annex (L): Format for the Environmental Permit

1 - General Information:

Project Title:			
Project Category:	A☐	B☐	C☐
Project Sector :			
Address of the Project:			
Name of the owner: (individual, company, etc.)			
	Tel:	Fax	
	Email:		
Name of the Environmental Consultancy Office/Firm who prepared the EIA:			
	Tel:	Fax	
	Email:		
Name of the Competent Governmental Authority :			
Type of project:	☐ New	☐Extension and its type:	
	If the type of project is an extension, has an EIA study been submitted for the original project? ☐ Yes ☐ No		
	Date of obtaining the previous KEPA approval (attach the approval): Attachment no (1)		
	Date of obtaining the first project license (if any): Attachment no (2)		

2 - Project Information

Total area of the project (m2):	
Total area for project buildings (m2):	
Project Location and Site *(Please attach a general description of the project location and a map)*	

3 -Description of Project Phases

Construction Phase		
Expected date of Construction:		
Time schedule for Construction:		
Brief description of the activities during the construction phase		
Water sources:	Water uses:	Water consumption rate:
Fuel type (s):	Source of fuel:	Consumption rate:
Expected workforce and accommodation location:		

Waste generated during construction and methods of disposal:	<u>Solid wastes</u> Types: Quantities: Disposal methods:
	<u>Liquid wastes</u> Types: Quantities: Disposal methods:
	Air emissions (smoke, odour, fumes, particulates) :
	Noise:
	Other types of waste (please specify):

Operation Phase	
Expected date of operation:	
Brief description for operation phase (attach illustrative figures):	

<table>
<tr><td>Main components of the project:</td><td colspan="4"></td></tr>
<tr><td rowspan="2">Sources of water</td><td>☐Municipal</td><td>☐Ground-water</td><td>☐Surface water</td><td>☐ Other
(Please specify)</td></tr>
<tr><td colspan="4">Water consumption rate (m3/day):</td></tr>
<tr><td rowspan="2">Fuel:</td><td colspan="4">Type and source of fuel(s):</td></tr>
<tr><td colspan="4">Fuel consumption rate:</td></tr>
<tr><td rowspan="2">Electricity :</td><td colspan="4">Source of electric energy used:</td></tr>
<tr><td colspan="4">Electricity consumption rate:</td></tr>
<tr><td colspan="5">Expected workforce and accommodation location:</td></tr>
<tr><td colspan="5">Waste generated during operation and methods of disposal:</td></tr>
<tr><td rowspan="3">Air emissions:</td><td colspan="4">Discharge rate of air emissions to the atmosphere (m^3/hr):</td></tr>
<tr><td colspan="4">Description of the treatment of air emissions and expected quality after treatment:</td></tr>
<tr><td colspan="4">Attach the expected analysis for air emissions in comparison to allowable National Emission Limits.</td></tr>
</table>

Liquid wastes	Sewage wastewater Discharge rate (m3/day): Treatment/Disposal methods (public sewer system, septic tanks, others): (In case there is a sewage treatment unit: Attach a description of the components of the unit and method to dispose of sludge and treated wastewater as well as the characteristics of the unit effluent)
	Industrial wastewater: Discharge rate (m3/day): Treatment/Disposal methods: (In case there is an industrial wastewater treatment unit: Attach a description of the components of the unit while indicating chemicals used and the disposal method for treated wastewater and the characteristics of the unit effluent)

Solid and hazardous waste	Types of waste : Generation rate:
	Methods for transportation, handling and storage:
	Methods for disposal (contractor, landfill, others):

4 - Work-place Environment:

Parameters to be monitored in the work environment:	
Measures to be taken for workers protection :	(*i.e., ventilation, protective equipment, gas suction systems, etc.*)
Others:	

5 -Analysis of Environmental Impacts

(Extract chart from the ESIA Study/ ESA Report)

6 - Environmental Management Plan

(Attach the table for the mitigating, monitoring and institutional measures in the ESIA Study or the ESA Report)

7 - Declaration of the Environmental Consultancy Office/Firm

I, the undersigned, certify that the statements made by me are true, complete and correct and that in case of any modification of the information stated above, KEPA shall be informed through the Competent Governmental Authority.

A : Owner of the Environmental Consultant Office :

Name :	
Position:	
Address:	
Date:	
Signature:	

B : Leader of the (EIA study / report) team :

Name :	
Position:	
Address:	
Date:	
Signature:	

C :Approval of Environment Public Authority :

Chairman of the Board & Director General	Deputy Director General for Environmental Monitoring Affairs	Manager of Planning & EIA Department	Head of the Section	Employee Name

Main Stages of EIA (UNEP, 1996)