

SECTION C: CHECKLIST OF ISSUES TO CONSIDER FOR A PROJECT APPLICATION

☞ This section comprises three subsections –

- Introduction
- Proposed checklist for the project application
- Suggestions on the format of the project application.

C1 Introduction

The Environmental Management Act requires a Project Proponent to submit a Project Application as a first step towards obtaining an Environmental Clearance for his/her proposed project. Section C is intended to assist the project proponent in submitting the application.

Although a prototype application form is available at the Ministry of Environment and Tourism, (Department of Environmental Affairs) the draft Environmental Management Act requires the contents of the project application form to be prescribed by regulation. This can only be done once the draft Act becomes legislation.

Nevertheless, the final form is likely to require at least information on: –

- The location, nature and size of the project,
- The current state of the environment,
- The project’s potential impacts on the environment,
- Any other detail which might be needed to determine whether an environmental assessment is needed or not.

Section C2 below provides a checklist of environmental issues which the proponent should review before submitting his/her application for environmental clearance via the Department of Water Affairs of the Ministry of Agriculture, Water and Rural Development for principle approval to abstract water, to the Department of Environmental Affairs of the Ministry of Environment and Tourism [Environmental Commissioner].

C2 Preliminary checklist of environmental issues to be reviewed

The process of identifying the issues which might need to be investigated further because of the likelihood of significant impacts is called “scoping”, or an “initial environmental review”.

Once the initial environmental review is complete, the project proponent will be able to submit an application which describes the project, the alternatives identified for the project, identifies the environmental issues involved, sets out how to manage the project’s positive and negative effects, and reflects the interests of affected parties. The purpose of the review is to assist decision-makers in granting or refusing an Environmental Clearance for the project at that stage, or calling for a full environmental assessment. A thorough scoping or review of

issues in a well-presented application is therefore of benefit to both the proponent and the decision-maker in expediting the environmental assessment process.

The initial environmental review should include at least the following steps, not necessarily in the order set out below:

Nr.	Step
1	Study the relevant legislation, available relevant reports on the environment in question, water, environmental assessment, the political region, and particular area under consideration
2	Hold preliminary discussions with the responsible government agencies
3	Describe the project
4	Identify and describe alternative scenarios for the project
5	Study the current state of the environment at each alternative site
6	Inform yourself about the affected community, and other interested and affected parties, and then invite public participation
7	Identify the environmental issues at each site
8	Assess which impacts are significant
9	Draw up a preliminary management plan for those impacts judged to be significant

A checklist for each of the review elements described above, is presented next:

Review Step	Guideline comment
1	<p>Study the relevant legislation, available relevant reports on the environment in question, water, environmental assessment, the political region, and particular environment in question</p> <p>▲</p> <ul style="list-style-type: none"> • Read Section B of these guidelines • Consult the information sources listed in Section E of these guidelines • Ensure that you are aware of the requirements of current and planned legislation [listed at Sections E1 to E3] • Satisfy yourself that the water required cannot be delivered by one of the existing schemes listed in Section E5 of these guidelines
2	<p>Hold preliminary discussions on the project, and possible alternative scenarios for the project, with the responsible government agencies</p> <p>▲</p> <ul style="list-style-type: none"> • Ministry of Environment and Tourism • Ministry of Agriculture, Water and Rural Development • Ministry of Lands, Resettlement and Rehabilitation • Ministry of Regional and Local Government and Housing • Regional Council • Local Authority

Review Step	Guideline comment
	<ul style="list-style-type: none"> • National Planning Commission • Namwater
3	<p>Describe the project</p> <p>▲</p> <ul style="list-style-type: none"> • Include a brief description of the project’s activities, processes and technology • Draw up a location plan for the site and/or route of infrastructure • Obtain information on the previous history of the site/route. Check that the current land use, and land use zoning for the site are not in conflict with the proposed project • Draw up a site/route layout plan showing existing and proposed buildings and existing infrastructure such as transport, power and water routes • Compile a flowchart of the inputs and outputs into the water development infrastructure or process envisaged. Both process and technology should be clear from the flowchart • List the types, and estimate the quantities of inputs and outputs at each stage of the process for example water use demand, projected demand, etc. The following information on water input MUST be supplied in order to obtain principle approval for water abstraction: (a) water source (b) annual volume water required (c) daily peak demand in cubic metres • Provide in a table information on the number of people likely to be employed during the project’s construction and operation • Indicate the socio-economic impacts • Indicate start-up capital expenditure • Estimate the start and completion date of construction, and start date of operation. Indicate the anticipated life expectancy of the project
4	<p>Identify and describe alternative scenarios for the project</p> <p>▲</p> <p>Generate at least one alternative scenario for the project by considering some or all of the following options:</p> <ul style="list-style-type: none"> • Demand management alternatives – for example, can available water infrastructure in the area be used more efficiently or effectively, rather than building more infrastructure? • Process alternatives – can largely the same product or service be achieved by using alternative, possibly less damaging processes, inputs or outputs? Can inputs be recycled for example? • Location alternatives – where else could the project be located? Could

Review Step	Guideline comment
	<p>components of it be located elsewhere?</p> <p>Describe what the significance would be of the null scenario, that is, non-implementation of the project.</p>
5	<p>Study the current state of the environment at each alternative site</p> <p>☞ Using primarily the desk study method and available expertise, gather available information on the following biophysical aspects of the site/route, and of at least its local and regional context:</p> <p>▲</p> <ul style="list-style-type: none"> • Land: current & earlier land uses, current land zoning, current ownership • Climate • Vegetation <ul style="list-style-type: none"> • Expected composition • Expected endangered/rare species present • Geology • Soil • Topography • Hydrology and Geohydrology <ul style="list-style-type: none"> • Proximity • Quantity • Quality • Drainage patterns • Water table depth • Air quality • Expected animal life – commonly occurring as well as rare/endangered species present • Palaeontology • Archaeology <p>☞ Again using primarily the desk study method and available expertise, also gather available information on the socio-economic structure of the area/s containing the site/route, at least at local and regional level:</p> <p>▲</p> <ul style="list-style-type: none"> • Demographics • Employment and income • Community facilities and services • Land tenure • Urban/rural structure <p>☞ Undertake a brief reconnaissance of the site/route, which takes the above factors into account. If a full environmental assessment is required, see the guidance on site data-gathering at Section D.</p>

Review Step	Guideline comment
	<p>☞ Note information gaps so that they can be reported on.</p>
6	<p>Inform yourself about the community/ies living at or near the proposed sites for the project, as well as about potential interested and affected parties.</p> <p>Visit the sites and try to form an idea of the communities' lifestyle</p> <p>Commit yourself publicly to an informed, open and participatory approach in establishing and operating your project</p> <p>▲</p> <p>People's <i>perceptions</i> about a proposed project are as important as the realities.</p> <p>Urban communities are likely to be concerned about</p> <ul style="list-style-type: none"> • possible reduction in standards of living/quality of life • property values • personal safety, including hazards for their children or their elderly • increased crime • potential health hazards • atmospheric emissions (dust, smells, vibration) • pollution (visual, noise, waste, dust, litter) • increased traffic volumes • general appearance of infrastructure (ugliness minimized) • loss/disturbance to values such as landscape and vegetation • what happens when/if the project ends <p>In addition to the above, rural communities might wish to bring forward</p> <ul style="list-style-type: none"> • Livestock wellbeing and loss of grazing areas • Loss or disruption to traditional means of livelihood • Possibility of being employed in the project • Probability of project's increasing the area's development • Need for water • Limitations on access to formerly open areas • Damage to valued traditional, spiritual or historical places <p>☞ Provide information on the project, and alternative scenarios for it, and request the community for its comments/concerns through any or all of the following:</p> <ul style="list-style-type: none"> • Notices in the local newspapers • Notices over NBC, including the local vernacular services • Flyers distributed on-site to community residents • Informal discussions with key community representatives • Discussions with any other stakeholders identified in the process

Review Step	Guideline comment
	<ul style="list-style-type: none"> • A background information document distributed to a list of stakeholders, which also invites comments or concerns • A public open house display • A well-advertised public meeting at an easily-accessible venue, on a day and at a time which suits the community’s general lifestyle, to give information on the project and to hear concerns and comments • Feedback mechanisms such as another meeting, a newsletter, notices in the media
7	<p>Establish what preliminary environmental issues exist at each site</p> <p>An environmental issue may be either a quantifiable impact such as noise levels, or dust concentrations, or perceived concerns raised during the initial stage of the public participation process.</p> <p>Using the information gathered during the previous steps, list the potential positive and negative impacts/concerns of the water infrastructure project:</p> <p>Typical <i>ecological impacts/concerns</i> could be</p> <ul style="list-style-type: none"> • Landscape disturbance • Ground erosion, subsidence, and instability • Loss of vegetation through site clearance • Habitat disturbance/loss, and displacement of fauna • Disruption of local ecological processes • Biodiversity loss through damage to endangered species • Alien species invasion • Creation of new and acceptable habitats for humans, fauna and flora <p>Typical <i>water impacts</i> could be</p> <ul style="list-style-type: none"> • Alteration of water courses • Effects on quality, quantity and availability of surface and ground water • Proposed water infrastructure does not directly benefit local community • Water availability for local or downstream users endangered • Salination of water or land • Contamination of land/water • Increased water availability for local people <p>Typical <i>land use impacts/concerns</i> could be</p> <ul style="list-style-type: none"> • Major changes in land use • Compatibility/incompatibility with adjoining land uses • Loss of land for alternative current land uses • Loss/change in land capability eg for agriculture • Increased demand on natural resources in the area • Loss of /disturbance to adjoining land conservation areas • Creation of new natural resources in the area • Creation of opportunities for alternative beneficial land uses

Review Step	Guideline comment
	<p>Typical <i>social impacts/concerns</i> could be</p> <ul style="list-style-type: none"> • Nuisance factors for the public, such as <ul style="list-style-type: none"> • Dust • Noise • Odour • Increased vehicular traffic • Increased human influx to, or movement through the area • Occupational health and safety hazards for project personnel • Pollution from project’s waste streams • Increase in disease • Loss/damage to valued cultural, historical or spiritual valued places and customs • Community displacement/severance • Creation of local employment opportunities • Water infrastructure provides impetus for further regional development <p>Typical <i>infrastructure impacts/concerns</i> could be</p> <ul style="list-style-type: none"> • Visual pollution of poorly sited/designed infrastructure • Obstruction/closure of pathways and tracks for humans, stock and game • Increased loads on local services: <ul style="list-style-type: none"> • Transport infrastructure • Telecommunication infrastructure • Housing infrastructure • Social service infrastructure such as health and education provision • What to do with the infrastructure if the project is decommissioned or closed <p>For further guidance on impacts, see Section D3</p>
8	<p>Assess which impacts are significant</p> <p>▲</p> <p>Not all impacts are <i>significant</i>. It is important to identify those which are, because an environmental management plan usually provides mitigatory actions, which could include monitoring and rehabilitation, for significant impacts only.</p> <p>List each impact for each phase of the project - construction, operations and closure – and then assess at least the scale [extent], severity, likelihood of occurrence and duration of each identified impact for each phase of the project - construction, operations and closure.</p> <p>At the stage of project application, it is sufficient to undertake a <i>qualitative assessment</i> of the significance of each identified impact. One such method is suggested at Section D4.1 of these guidelines.</p>

9	<p>Draw up a preliminary environmental management plan (EMP) for those impacts judged to be significant</p> <p>▲</p> <p>At project application stage, the plan could comprise a table containing two columns: Column A – State the significant environmental impact Column B – Suggested mitigation measure for that impact.</p> <p>Consult Section D for ideas on possible mitigation measures for the particular impact</p>
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C3 Suggested format and content of the project application

The initial project application will rely heavily on information gathered in the initial environmental review process described above. As far as possible, you should present this information in tabular or illustrated form. Avoid lengthy text paragraphs. Avoid technical language.

Although the prescribed form for submitting an initial project application is not yet available, there are certain basic elements which should be included in the application documentation. These are:

- Introduction to the project
- Description of the environment
- Project description
- Consultation with interested and affected parties
- Identification of impacts
- Management of significant impacts.

Guidance for each element is provided on the next page:

Aspect of project application	Guidance
Introduction to the project	<p>Using information from steps 3 and 4 of the environmental review –</p> <ul style="list-style-type: none"> • Give details of the company or venture • State the company’s environmental policy • Describe the project’s objectives • Set out the benefits of the project for the region • Describe the implications of the project’s not going ahead • Give a timetable for the project’s planning, construction and operation • Indicate expected employment opportunities • Indicate the expected life span of the project
Project description	<p>Using information from steps 3 and 4 of the environmental review –</p> <ul style="list-style-type: none"> • Indicate the alternative scenarios considered for the project • Broadly describe each phase of the project’s life including site preparation, construction, operation, decommissioning and site closure • Provide the general layout plans, site layout plans, process flow chart and organizational table compiled during the initial environmental review
Description of the environment at the selected sites	<ul style="list-style-type: none"> • Provide information on all the aspects listed at step 5 of the initial environmental review • This section should give a comprehensive description of the area <i>before</i> development
Consultation with interested and affected parties	<p>Based on steps 2 and 6 of the initial environmental review –</p> <ul style="list-style-type: none"> • Report on initial consultation process with the relevant authorities, the affected community, and other interested parties • Summarize the issues which emerged
Identification of impacts	<p>Based on steps 7 and 8 of the environmental review</p> <ul style="list-style-type: none"> • Report on <i>all</i> the environmental issues/impacts identified during the review • Identify those impacts considered significant at each phase of the project - construction, operations and closure

Management of significant impacts	<ul style="list-style-type: none">• Provide the preliminary environmental management plan discussed at step 9 of the environmental review• Discuss briefly how you at this stage intend to deal with any residual impacts of the project should it be decommissioned or closed.
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