

14. SWAZILAND

14.1 National Vision for Environmental Protection in Swaziland

The Government of Swaziland has formulated several policies, strategies and action plans aimed at achieving sustainable development in the country. Among these are the National Development Strategy,²⁴¹ the Economic and Social Reform Agenda and the Poverty Reduction Strategy and Action Plan. The National Development Strategy outlines the country's development goals for 25 years, starting in 1997.²⁴² Its main vision is that:

“By the year 2022, the Kingdom of Swaziland will be in the top 10% of the medium human development group of countries founded on sustainable economic development, social justice and political stability.”

One of the main priorities identified in the National Development Strategy is environmental management, which is viewed as an important and necessary condition for the attainment of sustainable development.

The Economic and Social Reform Agenda is a programme of action that sets target dates for the completion of tasks that are necessary for the economic and social development of the country. It is an ongoing process initiated by the Office of the Prime Minister that entered its third phase in May 2002, which is known as the Millennium Action Programme. This initiative demonstrates the Government's commitment to improving the country's economic and social development.²⁴³

14.2 Institutional and Administrative Structure for EIA in Swaziland

14.2.1 The Swaziland Environmental Authority

The key institutions involved in the management of environmental impact assessments (EIA) are the Swaziland Environment Authority (SEA), the Ministry of Economic Planning and Development (MEPD) and the municipalities. The Swaziland Environment Authority, created by an Act of Parliament in 1992, is directed by a management board²⁴⁴ that sets policy priorities. The format, protocols and procedures of the authority are set out in detail in the First Schedule of the Act. The authority has initiated a process by means of which it would become an autonomous body operating outside of government, but would still largely depend on government funding.²⁴⁵ This process has been finalised with the enactment of the Environmental Management Act No. 5 of 2002 which establishes SEA as a body corporate with perpetual succession to

²⁴¹ Government of Swaziland (1999). National Development Strategy – Vision 2022: Key Macro and Sectoral Strategies. Mbabane, Swaziland.

²⁴² Even though the document was finalised in 1999, it states that it aims to make the changes from when it was started in 1997.

²⁴³ Keatimilwe, K and Mlangeni, J (2003). Country Chapter on Swaziland in “EIA in Southern Africa.” Southern African Institute for Environmental Assessment, Windhoek, Namibia.

²⁴⁴ The Board comprises a Chairperson appointed by the Minister for Tourism, Environment and Communications, as well as the Principal Secretaries from the following ministries: Agriculture and Cooperatives; Ministry of Finance, Natural Resources and Energy; Tourism, Environment and Communications; Other members of the Board are two representatives from NGOs, two private citizens knowledgeable in environmental matters, and the Director of the Swaziland Environment Authority, who also serves as the Board Secretary.

²⁴⁵ Op. Cit. Footnote 243.

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be successor to the Swaziland Environment Authority established under the Swaziland Environment Authority Act No. 15 of 1992.

The organisational structure of the Ministry of Tourism, Environment and Communication is shown in Figure 14.1.

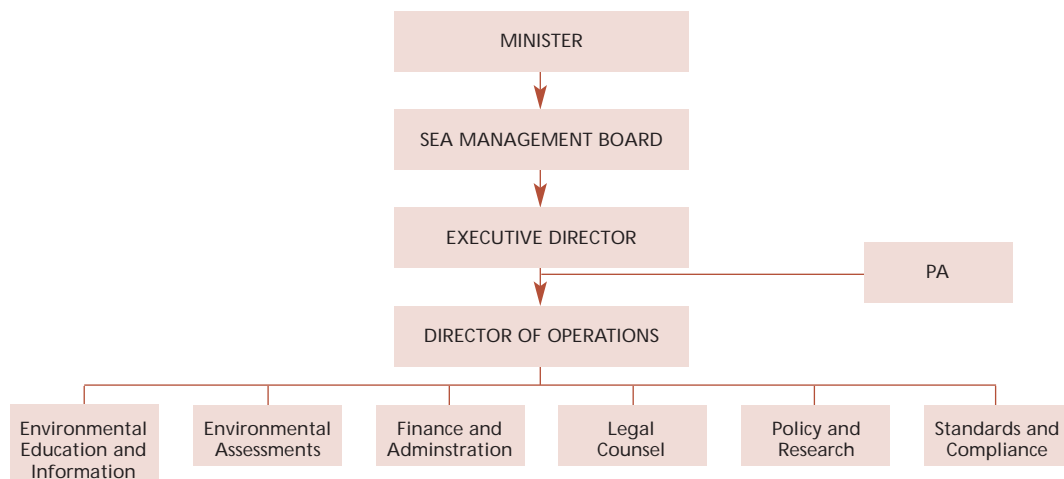
14.2.2 Intersectoral Cooperation

Intersectoral cooperation takes place through several government committees, one of the most important of which is the Planning and Budgeting Committee. The committee comprises principal secretaries of the Ministry of Finance, the Ministry of Economic Planning and Development (MEPD), and the Ministry of Public Service and Transport. Ideally, only projects that satisfy the government's objectives of sustainable development and environmental management are allocated funding.²⁴⁶

The MEPD is required to appraise government projects only if they incorporate a description of likely environmental impacts and the estimated cost for EIA studies. Otherwise, the projects should not be considered for inclusion in the national budget. The form for requesting government funding has been revised (in 2001) so that it is in line with the latest Environmental Audit, Assessment and Review Regulations. This means that the applicant must include in his request a section on likely environmental impacts, as well as a cost estimate for any EIA that may be required.

Intersectoral cooperation within the government could be further improved through the involvement of the Swaziland Environment Authority in other policy initiatives and strategies which are relevant to sustainable development, such as the development of the Poverty Reduction Strategy, where involvement of the SEA was apparently lacking.²⁴⁷

Figure 14.1: Organisational diagram of the Swaziland Environment Authority



²⁴⁶ Op. Cit. Footnote 243.

²⁴⁷ Op. Cit. Footnote 243.

Because of inadequate environmental management skills, the MEPA, other line ministries, and the private sector currently rely excessively on the Swaziland Environment Authority for project screening and categorisation.

14.2.3 Roles and Responsibilities

The main functions of the SEA are to:

1. Establish standards and guidelines relating to the pollution of water, land and air as well as those relating to noise and other forms of environmental pollution.
2. Develop, in cooperation with other government authorities, economic measures to encourage environmentally sound and sustainable activities.
3. Promote training and education programmes in the field of the environment to create national awareness of environmental issues.
4. Ensure the observance of proper safeguards in the planning and execution of all development projects, including those already in existence, that are likely to interfere with the quality of the environment.
5. Initiate measures for the coordination and enforcement of environmental protection legislation.²⁴⁸

The SEA's responsibilities with regard to EIA are described in Section 14.4 of this handbook.

14.3 Policy and Legal Framework for EIA

14.3.1 Environmental Policies

The Government of Swaziland has, as an overriding development plan, the National Development Strategy (NDS) supported by the Swaziland Environment Action Plan (SEAP).

The NDS outlines Swaziland's developmental goals for the next 25 years and is viewed as the highest level policy document. The SEAP is the environmental equivalent of the NDS and outlines the environmental issues relating to Swaziland's sustainable development with recommendations for actions to promote environmentally sustainable development.²⁴⁹ It lays down the principles of harmonisation of environmental legislation; the use of environmental guidelines and procedures, environmental impact assessments and market-based mechanisms; and the formulation of sectoral policies and strategies.

The NDS has spawned a variety of ministerial policies, strategies, action plans and legislation all of which more clearly articulate the broad policy statements made in the NDS and SEAP.

Table 14.1 presents some current and emerging policies and laws pertaining to land use, development planning, resource management and EIA.

²⁴⁸ Nexant (2006). "Hydroelectric Power Project EIA and SIA Requirements of Southern African Power Pool Member Countries and Relevant Development Assistance Agencies and Banks." Appendix I Swaziland.

²⁴⁹ www.ecs.co.sz

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Table 14.1: Existing and Emerging Policies on the Environment and Land Use

Policy/Action Plan/Strategy	Date	Status
Ministry of Tourism, Environment and Communications		
The Swaziland Environmental Action Plan	1997	Approved
The National Environment Policy	2000	Approved
The Swaziland Biodiversity Strategy and Action Plan	2000	Approved
The Environmental Education Strategy for Swaziland	2000	Approved
The Tourism Policy and Strategy	2002	Approved
The Swaziland National Solid Waste Management Strategy	2003	Awaiting approval
The National Framework on Biosafety	2004	Awaiting approval
The Alien Invasive Strategy and Action Plan	2004	Being formulated
National Capacity Self-Assessment Report on National Capacity Needs, Constraints and Priorities for the Implementation of the Climate Change, Desertification and Biodiversity Conventions	2004	Awaiting Approval
Assessment of the Status of Access and Benefit Sharing (ABS) of Genetic Resources in Swaziland	2005	Being formulated
Ministry of Agriculture and Cooperatives		
The National Action Programme of the Convention to Combat Desertification	2001	Approved
The National Forest Policy	2002	Approved
The National Forestry Programme	2003	Approved
The Rural Resettlement Policy	2003	Approved
Ministry of Natural Resources and Energy		
The National Land Policy	2000	Partially approved
The Rural Water Supply and Sanitation Sector Policy	2001	Being reviewed
The National Energy Policy	2002	Approved
The Mining Policy	2003	Awaiting approval
The Integrated Water Resource Management Plan and Water Efficiency Plan	2005	Being formulated
The National Water Policy		Being formulated
Ministry of Health and Social Welfare		
The National Environmental Health Policy	2002	Awaiting approval

Intersectoral collaboration within the government is not always effective. There is often the likelihood that duplication will occur between policies since the different government ministries develop them in parallel. There is also no evidence that mechanisms have been established to ensure that no such overlaps or contradictions occur between policies.

14.3.2 The Environment Management Act

The Environment Management Act (EMA) No. 5 was passed into law in November 2002 and replaces the Swaziland Environment Authority Act of 1992. The Act is intended to provide and promote the enhancement, protection and

conservation of the environment, sustainable management of natural resources and matters incidental thereto. Its main objectives therefore are:

- (a) To establish a framework for environmental protection and the integrated management of natural resources on a sustainable basis;
- (b) To transform the Swaziland Environment Authority into a body corporate;
- (c) To establish the Swaziland Environment Fund; and
- (d) To provide for matters incidental to the above objectives.

The Act is arranged in eleven parts as follows:

- Part I Introductory Provisions
- Part II Fundamental Purpose and Principles
- Part III Administration
- Part IV Integrated Environmental Management
- Part V Pollution Control
- Part VI Waste Management
- Part VII International Matters
- Part VIII Public Participation
- Part IX Compliance and Enforcement
- Part X Reviews and Appeals
- Part XI General and Transitional Provisions

Part II, Section 5 of the EMA sets out the underlying principles of the Act as follows:

- (a) The environment is the common heritage of present and future generations;
- (b) Adverse effects should be prevented and minimised through long-term integrated planning and the coordination, integration and cooperation of efforts, which consider the entire environment as a whole entity;
- (c) The precautionary principle, which requires that where there is a risk of serious or irreversible adverse effects occurring, a lack of scientific certainty should not prevent or impair the taking of precautionary measures to protect the environment;
- (d) The polluter pays principle, which requires that those causing adverse effects shall be required to pay the full social and environmental costs of avoiding, mitigating, and/or remedying those adverse effects;
- (e) The generation of waste should be minimised wherever practicable;
- (f) Waste should, in order of priority, be re-used, recycled, recovered and disposed of safely in a manner that avoids creating adverse effects or if this is not practicable, is least likely to cause adverse effects;
- (g) Non-renewable natural resources should only be used prudently, taking into account the consequences for the present and future generations; and
- (h) Renewable resources and ecosystems should only be used in a manner that is sustainable and does not prejudice their viability and integrity.

The provisions relating to EIA are found in Part IV. The EIA process as described in the Act is set out in detail in Section 14.4 of this handbook.

Strategic Environmental Assessment

Of particular note in the EMA is that provision has been made in Section 31 for Strategic Environmental Assessment to be undertaken for any parliamentary

bills, regulations, policies, plans and programmes which may have an adverse impact on the protection, conservation or enhancement of the environment or on the sustainable management of natural resources. Section 31(3) stipulates the contents of a Strategic Environmental Assessment report:

- (a) A full description of the Bill, regulation, public policy, programme, or plan and the objectives it intends to achieve;
- (b) An identification, description and assessment of the positive and adverse effects that implementation of the proposed policy, programme, plan or legislation is likely to have on the environment and on the sustainable management of natural resources;
- (c) An identification, description and assessment of the likely effects of alternative means to achieve the objectives of the Bill, regulation, policy, programme, or plan;
- (d) An identification, description and assessment of a range of practicable measures that could be taken to avoid, mitigate or remedy any adverse effect that may occur as a result of the implementation of the Bill, regulation, policy, programme, or plan; and
- (e) Any other information prescribed by the Minister by regulation.

If any proponent of a Bill, regulation, policy, programme or plan is in any doubt as to whether a Strategic Environmental Assessment is required, they are directed to consult SEA to determine the need for such a study.

Once the Strategic Environmental Assessment has been completed, the proponent has to submit all relevant documentation showing where changes have been made in response to the assessment and other comments.

14.3.3 Regulations

In April of 1996, the Minister of Natural Resources and Energy (MNRE), in consultation with the SEA, gazetted environmental regulations called the *Environmental Audit, Assessment and Review Regulations (EAARR)* which established guidelines and requirements for environmental impact assessments and environmental audit reports. The EAARR require any new projects, that are deemed to have an impact on the environment, to ultimately obtain an Environmental Compliance Certificate (ECC) from the SEA through the receipt of an Initial Environmental Evaluation (IEE) report and a Comprehensive Mitigation Plan (CMP), or an EIA report which contains a description of the mitigation measures to be implemented to reduce the environmental impacts of the proposed project. For existing installations, the regulations stipulate that an Environmental Audit be undertaken.

The 1996 regulations were revised in 2000 under the same name, providing more clarity and tightening weaker areas.

Regulations gazetted under the SEA Act, namely the Environmental Audit, Assessment and Review Regulations (EAARR) and Waste Regulations (2000) remain in force under the Environment Management Act. Air and water pollution regulations are currently in draft form and are due for Parliament's approval in 2007 as per the requirements of the Constitution.

The Waste Regulations were developed in 2000 to control the generation of waste and limit the activities that generate hazardous waste. They also provide for the declaration of Waste Control Areas in urban as well as rural areas.

14.3.4 Permits and Licences

An *Environmental Compliance Certificate (ECC)* is issued by the SEA when all the necessary environmental documentation has been submitted and approved by the authority for a proposed project. The assumption underlying the issuance of an ECC is that the proposed project is not likely to cause unacceptable environmental impacts and that the proponent will manage the construction and operation of the project in accordance with an approved comprehensive mitigation plan. In Swaziland, the term 'project' is defined as:

“a plan, operation, undertaking, construction, development, change in land use or other entity, or alteration which may not be implemented without a permit, licence, consent or approval from an authorising agency.”

There are several other important permits and licences required in terms of other environmental legislation in Swaziland relating to environmental issues. These are listed in Table 14.2.

Table 14.2: Environmental Permits and Licences

Act, Regulation or Byelaw	Permit or Licence	Requirements	Implementing Agency
Water Act, No 7 of 2003, sections 34, 35, 81.	Water Permit	A Water Permit is required to use water for industrial and agricultural purposes as well as for bulk water supply; to divert or store water, and to alter a water course. Has to be renewed every 5 years.	Water Apportionment Board
Water Act, No 7 of 2003, section 46	Borehole Drilling Permit	Permit required for drilling of any new boreholes.	Water Apportionment Board
Water Act, No 7 of 2003, sections 48-50	Permit for Groundwater Abstraction	Required for both existing and new groundwater abstraction schemes	Water Apportionment Board
Water Act, No 7 of 2003, section 62	Effluent Control Permit	This permit is required by anyone using water for industrial purposes and who wants to discharge effluent into a water course.	Water Apportionment Board
Water Act, No 7 of 2003, section 38	Temporary Water Permit	A temporary permit may be issued for the diversion, storage or use of water, which is valid for 3 years only and is non-renewable.	Water Apportionment Board
Flora Protection Act, 2000, sections 6, 7, 9, 15	Permit	Permit required to disturb, export, sell, or collect for scientific purposes, any species of protected flora, as listed in Schedule D of the Act.	Ministry of Agriculture and Cooperatives

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Act, Regulation or Byelaw	Permit or Licence	Requirements	Implementing Agency
Waste Regulations, 2000, section 6	Permit	Permit required to import, export or trade in waste.	SEA
Waste Regulations, 2000, section 14	Special Waste Carrier Licence	Required to transport 'special waste'. ²⁵⁰ Valid for 3 years.	SEA
Waste Regulations, 2000, section 17	Waste Management Licence	Required to operate a waste disposal facility.	SEA
Waste Regulations, 2000, section 23	Special Waste Management Licence	Required to keep, treat or dispose 'special waste'.	SEA
Waste Regulations, 2000, section 16	Environmental Clearance Certificate	EIA required for the development of a new waste disposal site in terms of the EMA and EAARR.	SEA
The Game Act, 1991, as amended, section 16(1) and section 19(1)	Permit	Permit required to hunt, kill or capture any game as specified on the permit, and to import or export trophies or raw game products.	King's Office
National Trust Commission Act, No 9 of 1972, section 29(2)	Permit	It is unlawful to destroy, damage, excavate, alter, remove or export any monument, relic, antique or other listed object without a permit.	SNTC
Wild Birds Protection Act, 1914, sections 4, 6-7	Permit	Required to sell or export plumage of wild birds and to capture, convey, sell, purchase or barter wild birds.	King's Office

14.3.5 Penalties

Regulation 15(1) of the EAARR states that a person, including an authorising agency, who contravenes or fails to comply with any provision of the regulations, or a condition of the ECC, or who does an act which is an offence under the Act, commits an offence and is liable on conviction to a penalty of five years imprisonment or E250, 000.00 or both.

Regulation 15(2) places the financial onus on the proponent or operator to redress or remedy any environmental damage, or any damage caused as a result of a contravention or failure to comply with the provision of the regulations, or any damage caused due to failure to comply with any of the conditions of the ECC for the project.

²⁵⁰ 'Special waste' is defined in the Regulations as hazardous waste and clinical waste.

14.3.6 Fees

At the time of writing, the following fees are specified for environmental review in Swaziland:

IEE	E1 500.00
EA	E1 500.00
EIA	E3 000.00
Resubmission fee	E500.00

14.3.7 Guidelines

Guidelines were published in 1999 to assist users to interpret and implement the Environmental Audit, Assessment and Review Regulations. No other guidelines have been developed to date.

14.3.8 Environmental Standards

Swaziland has developed objectives for water quality and air quality, standards for effluent discharge and a list of controlled air pollutants, as shown in Tables 14.3 to 14.5. At the time of writing, there were no standards for noise emissions and reference is therefore made to World Bank, WHO or donor country standards.

Table 14.3: Water Quality Objectives

Physico-chemical parameters	Standard/Objective
Dissolved oxygen	minimum of 4 mg/ℓ (surface water only)
pH	minimum 6.5 and maximum 8.5
EC	1 800 µ/cm maximum
Turbidity	5 Nephelometric units maximum
Hardness	1 000 mg/ℓ maximum (as calcium carbonate)
Chemical oxygen demand	10 mg oxygen/ℓ maximum
Biological oxygen demand	5 mg oxygen/ℓ maximum
Anions	
Nitrate	10 mg N/ℓ (as nitrogen) maximum
Nitrite	0.2-3 mg N/ℓ (as nitrogen) maximum
Ammonia	0.6 mg N/ℓ maximum
Fluoride	1.0 mg/ℓ maximum
Cations	
Iron	1 mg/ℓ maximum
Manganese	0.5 mg/ℓ maximum
Mercury	0.001 mg/ℓ maximum
Cadmium	0.003 mg/ℓ maximum
Aluminium	0.2 mg/ℓ maximum
Microbiological Parameters	
Total Coliforms	1 - 10 per 100 mℓ maximum
Faecal Coliforms	1 - 10 per 100 mℓ maximum

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Table 14.4: Effluent Standards

Parameter/Substance	Units of Measurement	Limit
Colour	mg/ℓ Pt Scale	20 maximum
Odour/Taste		not detectable after being diluted 3 fold
pH	pH units	minimum of 5.5 and a maximum of 9.5
Conductivity	mS/m	250 maximum
Dissolved oxygen	% saturation	minimum of 75%
Temperature	degrees C	maximum of 35
Chemical oxygen demand	mgO ₂ /ℓ	75 maximum
Biological oxygen demand	mgO ₂ /ℓ	10 maximum
Total dissolved solids	mg/ℓ	maximum of 500 above intake water
Suspended solids	mg/ℓ	25 maximum
Sodium content	mg/ℓ	maximum of 50 above intake water
Soap, oil or grease	mg/ℓ	100 maximum
Residual chlorine	mg/ℓ	0.1 maximum
Free and saline ammonia	mg/ℓ	10.0 maximum
Arsenic	mg/ℓ	0.5 maximum
Boron	mg/ℓ	1.0 maximum
Total chromium	mg/ℓ	0.5 maximum
Copper	mg/ℓ	1.0 maximum
Phenolic compounds (as phenol)	mg/ℓ	0.1 maximum
Phosphates	mg/ℓ	2.0 maximum
Lead	mg/ℓ	0.1 maximum
Cyanides	mg/ℓ	0.5 maximum
Sulphides	mg/ℓ	1.0 maximum
Fluorides	mg/ℓ	1.0 maximum
Zinc	mg/ℓ	5.0 maximum
Cadmium	mg/ℓ	0.05 maximum
Mercury	mg/ℓ	0.02 maximum
Total faecal coliforms	per 100 mℓ	10 maximum

Table 14.5: Air Quality Objectives for Controlled Air Pollutants

Parameter	Monitoring Period	Objective
SO ₂	24 hours	maximum average of 125 µgm ³
SO ₂	12 months	maximum average of 50 µgm ³
PM ₁₀ ²⁵¹	24 hours	maximum average of 50 µgm ³
NO ₂	12 months	maximum average of 40 µgm ³
Lead	12 months	maximum average of 1 µgm ³

²⁵¹ For the purposes of this Schedule, PM₁₀ means particulate matter capable of passing through an inlet of defined characteristics with a 50% sampling efficiency at 10µm aerodynamic diameter. Measurement of PM₁₀ must be carried out using instruments conforming to CEN standard prEN 12341.

14.3.9 Certification of Consultants

At present, there are no formal structures in place for the certification and/or registration of consultants who wish to undertake EIAs in Swaziland. Indeed there are no requirements in the legislation to disclose the names of the EIA team responsible for preparing the EIA report, or for any prior approval of the consultants by SEA.

14.4 EIA Procedural Framework in Swaziland for New Projects

14.4.1 Screening

The First Schedule of the EAARR contains lists of projects divided into three categories, depending on the likely impact on the environment (see Appendices 14-1, 14-2 and 14-3). It is up to the SEA to determine whether a proposed project will have any significant impacts on the environment and to determine into which category the project falls.

When assigning projects to Category 1, 2 or 3, SEA will consider whether the proposed site is in or near an environmentally sensitive area. Generally, proposed projects which are located in (completely or partially) or near an environmentally sensitive area may merit more detailed environmental studies and review than might have been the case if a location was elsewhere.

Not all environmentally sensitive areas have statutory or non-statutory forms of designation and protection. Some types of habitat, for example wetlands, may have no protection and be used as a resource by local people. Such habitats should be considered environmentally sensitive because, *inter alia*, they are rare, unusual or endangered and/or they provide a useful environmental service to local communities, and perhaps, the nation as a whole.

Examples of such environmentally sensitive areas are:

- Indigenous forests
- Wetlands
- Semi-arid areas and zones prone to desertification
- Areas/habitats which contain or support populations or rare or endangered species
- Water catchments containing major sources of public water supply
- Zones prone to flooding or other hazardous events
- Zones with high incidences of natural or man made erosion processes
- Areas of historical and archaeological interest
- Areas of cultural or religious significance (e.g. burial grounds, topographic features)
- Degraded areas which are subject to existing or proposed rehabilitation measures
- Areas used extensively for recreation and aesthetic reasons
- Zones of high biological diversity.

In assigning a proposed project to Category 1, 2 or 3, designated and non-designated environmentally sensitive areas should be taken into account to the fullest extent possible.

Category 1 projects are those which are unlikely to cause any significant impact on the environment, and therefore do not require an EIA. The types of projects which may be allocated to Category 1 include, for example, small-scale commercial buildings, small-scale social infrastructure projects such as rural clinics, and remote (non-intrusive) prospecting for groundwater, minerals and hydrocarbons (see Appendix 14-1 for the full list of Category 1 projects). If the SEA is satisfied that the project falls under Category 1, an Environmental Compliance Certificate (ECC) will be issued and the project can proceed (see Figure 14.2).

Category 2 projects are those that could have some significant adverse environmental impacts, but whose scale and magnitude is relatively easy to predict without having to do a detailed EIA. Such projects require an *Initial Environmental Evaluation (IEE)* (not a full EIA) and a *Comprehensive Mitigation Plan (CMP)*. The types of projects which may be allocated to Category 2 include: medium-scale agro-industries, rural electrification projects, renewable energy production, tourism infrastructure, rural water supply and sanitation (see Appendix 14-2 for the full list).

Category 3 projects are those that are likely to have significant adverse impacts on the environment. An in-depth *EIA study* is therefore required to adequately predict the scale and magnitude of the impacts of these projects on the environment, together with an appropriate *Comprehensive Mitigation Plan (CMP)*. Typical Category 3 projects include dams and reservoirs, large-scale irrigation and flood control schemes, mining projects, resettlement schemes, thermal and hydropower schemes (see Appendix 14-3 for the full list).

14.4.2 Initial Environmental Evaluation

IEE Report

An Initial Environmental Evaluation (IEE) is required for Category 2 projects. The Second Schedule of the EAARR contains an outline of the contents expected in an IEE report:

Introduction: Purpose of the IEE

Description of the Project: Location, size, construction or operational activities, schedule for implementation, workforce, any alternatives.

Description of the Environment: Brief description of physical, ecological and human aspects of the site and its surroundings.

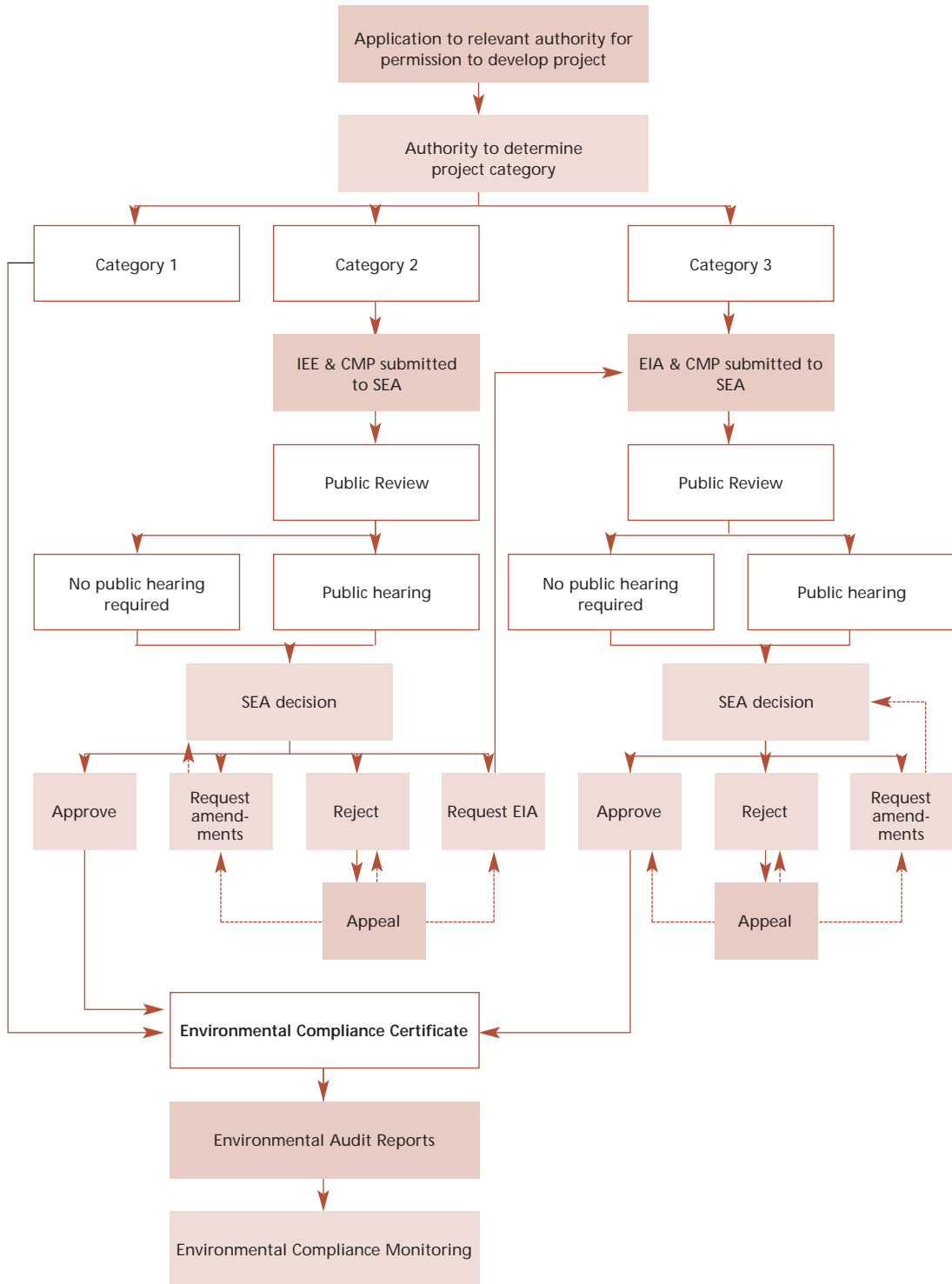
Impact Description and Evaluation: Brief account of the significant impacts likely to occur if no mitigation occurs. If an EIA is needed because of the nature and extent of expected impacts then a recommendation to this effect should be made.

Impact Management: Description of mitigation measures and monitoring programmes.

Schedule of implementation: Technical and institutional requirements for successful implementation.

The IEE report should be short (no more than 20 pages) and written in clear, simple language. The accompanying Comprehensive Mitigation Plan must

Figure 14.2: EIA Process Flow Diagram



conform with the requirements set out in the Second Schedule of the Regulations and described below.

Comprehensive Mitigation Plan

The IEE report must be accompanied by a Comprehensive Mitigation Plan (CMP), which should focus on the significant impacts identified in the IEE report. The contents of the CMP are set out in the Second Schedule of the Regulations and are listed below.

The CMP must contain details relating to:

- Impacts to be prevented or reduced in severity;
- Benefits to be enhanced;
- Mitigation measures to achieve the above;
- Costs, institutional and training requirements;
- Monitoring programmes to track project related impacts and implementation of mitigation measures; and
- Community liaison procedures needed.

The plan must also contain:

- Schedules for implementation/targets;
- Reporting procedures;
- Work programmes budget; and
- Staffing and training requirements.

Submission of the IEE and CMP Reports

The proponent must submit the IEE report and CMP to the authorising agency (if not SEA) or the MEPD which shall forward the documents to the SEA within *10 days* of receipt. The SEA then has *15 days* to decide whether the IEE report and the CMP conform to the prescribed reporting requirements or guidelines specified in the Second Schedule of the EAARR. If the documents do not conform with the specified requirements, the project proponent is requested to resubmit an amended set of documents for consideration by SEA.

Public Review of IEE and CMP Reports

Immediately after the SEA has received the IEE and CMP, it is required (in terms of Regulation 11(7)) to:

- (a) Distribute copies of the documents to affected ministries, local authorities, parastatals, non-governmental organisations and any other stakeholder;
- (b) Display conspicuously such copies in public places or such places in the vicinity of the site of the proposed project; and
- (c) Place a notification:
 - (i) In the Government Gazette;
 - (ii) On the Swaziland Broadcasting Service; and
 - (iii) In a newspaper circulating in Swaziland twice a week and for two consecutive weeks, specifying the place and the times where copies may be available for inspection and the procedure for the submission of comments and objections (see Figure 14.2).

The public is allowed *15 days* to submit comments on Category 2 projects, but this period can be extended by the SEA for a period not exceeding 10 days if the project is considered to be sensitive.

Where the SEA believes a project is likely to have significant impacts on the environment of a neighbouring country or if that country so requests, the Authority shall forward the relevant reports and documents to that country at the same time that the documents are made available for public review in Swaziland.

Public Hearing

Following the public review period, the SEA has 5 days to decide whether or not a public hearing is necessary. This decision is usually based on one or both of the following:

- (a) If after examining the documents and the reports, the SEA is of the opinion that the project is of such a sensitive nature that the public should have the opportunity to make submissions or comments at a public hearing; or
- (b) If the public concern over the project is great and the number of written and substantiated objections exceeds ten.

Notice of the public hearing is given by the SEA, which has to ensure that:

- (a) A notice is published at least once a week for two consecutive weeks, in a newspaper circulating in Swaziland stating the date and place where the public hearing is to be held at least 15 days before the public hearing is held and the expenses in respect of the publication of the notice shall be borne by the proponent;
- (b) All reports, documents, written comments and objections during and after the period of public review are displayed and made available until the public hearing is finalised; and
- (c) Any party who has an interest in the outcome of the public hearing, including the project proponent, the authorising agency, the commenting agency and any other person, must be called upon to attend the public hearing or solicit in writing, comments from other government agencies or offices with expertise or regulatory power over the proposed project.

The public hearing will be presided over by persons nominated by SEA in terms of regulation 12. The chairperson of the public hearing has to produce a report, approved by all the officers assigned to the hearing, within *15 days* of the public hearing. This report will also be made available for public inspection.

Decision on Category 2 Projects

Once the SEA has reviewed the IEE report and the CMP, all public submissions, as well as the public hearing report (if necessary), they will:

- (a) Approve the project and issue an ECC; or,
- (b) Request the proponent to prepare and submit a full EIA and CMP (see section 14.4.3 below); or
- (c) Request the proponent to make appropriate amendments to the IEE and/or CMP as directed (see Figure 14.2)

14.4.3 Environmental Impact Assessment Study

Environmental Impact Assessment Report

An in-depth Environmental Impact Assessment (EIA) is required for Category 3 projects, or for those projects which are located in environmentally sensitive

areas (see section 14.4.1). The contents of an EIA report are specified in the Second Schedule of the EAARR and are as follows:

Executive Summary: A brief account (no more than 10 pages) of the findings of the EIA with the emphasis on the key issues for consideration by decision-makers in the Swaziland Environment Authority, the authorising agencies and members of the public.

Introduction: Purpose of the EIA. Boundary of the study area and time horizon for which the impacts will be predicted (speculated future date or time).

Description of the Environment: An overall evaluation of the types and quality of the environment (bio-physical and social components and processes) within the study area with specific information presented only when relevant to the prediction and evaluation of impacts. Description of any expected changes to the "baseline" environmental situation before implementation of the project subject to an EIA (the "no project" alternative).

Prediction and Evaluation of Impacts: For all alternatives:-

- Distinguish between significant, adverse and beneficial impacts;
- Identify irreversible impacts;
- Allocate significance against international and or national regulations, standards and quality objectives governing:
 - Health and safety
 - Protection of environmentally sensitive areas;
 - Land use; and
 - Ambient pollution levels;
- Identify significant data deficiencies and assumptions made;
- Determine the spatial and temporal distribution of impacts.

Analysis of Alternatives and Selection of Preferred Option: Select preferred alternative on the basis of the comparison of the environmental impacts of each option.

Impact Management Plan (for Preferred Alternative): Action to enhance benefits and prevent or reduce adverse impacts.

Schedule for implementation: Technical and institutional requirements for successful implementation.

Consultations: Results of any consultation held with government agencies, NGOs and the public during EIA work.

Comprehensive Mitigation Plan

The EIA report must be accompanied by a Comprehensive Mitigation Plan (CMP), which should focus on the significant impacts identified in the EIA report. The contents of the CMP are set out in the Second Schedule of the Regulations and are listed below.

The CMP must contain details relating to:

- Impacts to be prevented or reduced in severity;
- Benefits to be enhanced;
- Mitigation measures to achieve the above;
- Costs, institutional and training requirements;
- Monitoring programmes to track project related impacts and implementation of mitigation measures; and
- Community liaison procedures needed.

The plan must also contain:

- Schedules for implementation/targets;
- Reporting procedures;
- Work programmes budget; and
- Staffing and training requirements.

Submission and Review of EIA and CMP Reports

On completion of the EIA and CMP reports, the proponent must submit them to the authorising agency (if not SEA) or the MEPD, who shall forward them to the SEA within *10 days* of receipt. The SEA then has *20 days* to decide whether the EIA report and the CMP conform to the prescribed reporting requirements or guidelines specified in the Second Schedule of the EAARR, and whether these documents contain the necessary breadth, depth and types of analysis to allow for informed decision-making. If the documents do not conform with the specified requirements, the project proponent is requested to resubmit an amended set of documents for consideration by SEA.

Public Review of EIA and CMP Reports

Immediately after the SEA has received the IEE and CMP, it is required (in terms of Regulation 11(7)) to:

- (a) Distribute copies of the documents to affected ministries, local authorities, parastatals, non-governmental organisations and any other stakeholder;
- (b) Display conspicuously such copies in public places or such places in the vicinity of the site of the proposed project; and
- (c) Place a notification:
 - (i) In the Government Gazette;
 - (ii) On the Swaziland Broadcasting Service; and
 - (iii) In a newspaper circulating in Swaziland twice a week and for two consecutive weeks, specifying the place and the times where copies may be available for inspection and the procedure for the submission of comments and objections.

The public is allowed *20 days* to submit comments on Category 3 projects, but this period can be extended by the SEA for a period not exceeding 10 days if the project is considered to be sensitive.

Where the SEA believes a project is likely to have significant impacts on the environment of a neighbouring country or that country requests, the Authority shall forward the relevant reports and documents to that country at the same time that the documents are made available for public review in Swaziland.

Public Hearing

Following the public review period, the SEA has 5 days to decide whether or not a public hearing is necessary. This decision is usually based on one or both of the following:

- (a) If after examining the documents and the reports, the SEA is of the opinion that the project is of such a sensitive nature that the public

should have the opportunity to make submissions or comments at a public hearing; or

- (b) If the public concern over the project is great and the number of written and substantiated objections exceeds ten.

Notice of the public hearing is given by the SEA, which has to ensure that:

- (a) A notice is published at least once a week for two consecutive weeks, in a newspaper circulating in Swaziland stating the date and place where the public hearing is to be held at least 15 days before the public hearing is held and the expenses in respect of the publication of the notice shall be borne by the proponent;
- (b) All reports, documents, written comments and objections during and after the period of public review are displayed and made available until the public hearing is finalised; and
- (c) Any party who has an interest in the outcome of the public hearing, including the project proponent, the authorising agency, the commenting agency and any other person, must be called upon to attend the public hearing or solicit in writing comments from other government agencies or offices with expertise or regulatory power over the proposed project.

The public hearing will be presided over by persons nominated by SEA in terms of regulation 12. The chairperson of the public hearing has to produce a report, approved by all the officers assigned to the hearing, within 15 days of the public hearing. This report will also be made available for public inspection.

Decision on Category 3 Projects

Regulation 7 states that the SEA shall, within *20 days* of receipt of the public hearing report or inquiry, or within *20 days* after a public hearing or inquiry is judged not to be warranted, make a decision:

- (a) Allowing the proponent to proceed with the project and issue the proponent with an ECC; or
- (b) Disallowing the proponent from proceeding with the project as planned, if it would bring about unacceptable environmental impacts, or that the mitigation measures are inadequate. In this instance, the proponent is allowed to submit revised documents for the Authority's consideration.

The Authority's decision must be communicated as follows:

- (a) In writing to the authorising agency or the MEPD giving reasons, conditions and comments on its decision;
- (b) By publishing the decision in a medium to be decided by the Authority;
- (c) By publishing a detailed statement of the decision for public inspection by notification to all key stakeholders and interested and affected parties, by display in public places and through the media; and
- (d) By sending a copy of the decision to any persons who have in writing submitted comments or lodged an objection to the Authority in terms of the Regulations.

14.4.4 Appeals

A person who is aggrieved by the decision of the Authority or the findings of the public hearing may, after payment of the prescribed fee, appeal against

the decision or findings to the Minister within *15 days* from the date of the decision of the Authority and the Minister's decision shall be final.

14.4.5 Compliance Monitoring

Proponents of approved projects are required to hire environmental compliance monitors to prepare project compliance reports (PCRs) for review by the SEA. The frequency of reporting is normally specified by the Authority in the ECC, and depends on SEA's assessment of the nature of the project. Nonetheless, PCRs are usually completed once a month.²⁵²

The Authority occasionally inspects approved projects to ensure that their implementation is consistent with the recommendations of the CMPs. This has led to several cases of non-compliance being discovered in the construction sector, for example, which points to the Authority needing to undertake more and regular on-site inspections rather than relying on the objectivity of the compliance reports. Proponents are not always committed to implementing the CMPs because of the cost involved. Mainly as a result of staff shortages, the SEA has in most cases been reactive (rather than proactive) in auditing and taking appropriate steps against companies who do not comply with the required environmental standards.²⁵³

The Project Compliance Report should typically contain the following, as prescribed in the Second Schedule of the Regulations:

Introduction: Purpose of the report

Description of the Project: Location, size, phase of implementation (construction or operation) workforce.

Performance Review: Checking of implementation of CMP and actual impacts of projects (if data allows).

Recommendation: To improve performance and preparation of next PCR.

14.5 Environmental Audits for Existing Projects

Preparation and Submission of Environmental Audit Reports

In the EMA, distinction is made between proposed projects for which an environmental assessment is required, and existing projects, which require an environmental audit report. To this end, Regulation 5 of the EAARR requires the Authority (SEA) to:

- (a) Annually identify and maintain a list of projects which cause concern to the Authority, public or environment because of their impact on the environment and shall publish the list of such projects in its annual report;
- (b) Require an operator of an existing listed project to submit an Environmental Audit (EA) report (see below) and a CMP to the SEA within 6 months after notification to do so at his/her own cost; and
- (c) After receipt of the EA report and the CMP, determine within *15 days*, whether or not these documents conform to or are in accordance with the prescribed reporting requirements or guidelines under the Second Schedule of the regulations, and where the reports do not conform, the operator will be required to make good any deficiencies and resubmit, at their own cost.

²⁵² Op. Cit. Footnote 248.

²⁵³ Op. Cit. Footnote 248.

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On receipt of the EA and CMP, the SEA will distribute copies to every ministry concerned or responsible for the control of the project for its comments within 4 weeks.

It is also noteworthy that the EA report and a CMP are deemed to be public documents and copies may be made available by the Authority to whoever desires to have them without charge or at a minimal charge determined by the Authority. However, regulation 5(7) allows certain information in the documents to be made confidential if the operator can prove that disclosure will be detrimental to his commercial operations or the national interest of the country. In instances where the entire document is considered to be confidential, the operator must make a summary EA report available for public review and comment.

The procedures for public review, inspection, submission of comments and objections on the EA report and CMP are the same as those described in Section 14.4 above.

Once the SEA accepts the CMP and advises the operator of such in writing, the operator has *15 days* to implement the requirements of the CMP.

Contents of an Environmental Audit Report

The Environmental Audit (EA) report is required to contain at least the following:

Introduction: Purpose of EA report

Description of the Project: Location, size, workforce, inputs and outputs, operations and manufacturing processes, transport.

Description of the Environment: Brief description of physical, ecological and human aspects of the site and its surroundings.

Impact Description and Evaluation: Inventory with amounts of all effluent discharges, after pre-treatment to air, water, and land (including noise, vibration and odour). Inventory of all solid wastes produced and their handling, storage, transport and eventual deposition. Inventory of chemicals which are used in operational or manufacturing processes and which reach air, water or land through non-point sources. Concentrations of chemical, radiological and energy pollutants in air, water and land in the vicinity of the installation (based on inventory). Identification and evaluation of the impacts of these concentrations on the environment and health (when data allows).

14.6 Other Relevant Environmental Legislation in Swaziland

Environmental issues cut across a wide variety of sectors and, under the current situation, there are numerous pieces of legislation in Swaziland, which have a bearing on the environment and should be considered in EIA decision-making. The sectors, titles of the legislative instruments, the responsible agency and the purpose of the legislation are summarised in Table 14.6.

Table 14.6: Other Potentially Applicable Sectoral Requirements²⁵⁴

Information Required	Responsible Agency	Title and Date of Document	Purpose
Water Resources	Water Resources Branch / National Water Authority	The Water Act, No 7 of 2003	This Act is intended to harmonise the management of water resources in the country. Its provisions include the establishment of a National Water Authority, and of a Water Resources Masterplan. This plan will contain an inventory of the total water resources of Swaziland, and a comprehensive programme of action in which the maximum value can be obtained from this resource for the benefit of the people of Swaziland.
Water Resources	SEA (in association with WRB)	Water Pollution Control Regulations, 1999 (draft) (replaces the Purification of Industry Water and Effluent Regulations, No 25 of 1967)	Regulations for the control and management of water quality. Sets out water quality objectives and effluent standards in Schedules 1 and 2 respectively.
Air	SEA	The Air Pollution Control Regulations, 1999 (draft)	Regulations for the control and management of air pollution. Sets out air quality objectives and a list of controlled air pollutants in Schedules 1 and 2 respectively.
Noise		No legal instruments to control noise at present	
Waste	SEA	Waste Regulations, 2000	Regulations for the management of solid waste and liquid waste and hazardous waste disposed of on land or furnaces. See Table 14.2 for list of permits required in terms of these regulations.
Energy	Swaziland Electricity Board (SEB)	(i) Electricity Act, No 10 of 1963	(i) The Act establishes the Swaziland Electricity Board and imposes upon it the function of supplying electricity to those requiring it. The SEB is empowered to acquire land, erect infrastructure, enter any land in pursuit of or the provision of services, etc.

²⁵⁴ Op. Cit. Footnote 248.

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Information Required	Responsible Agency	Title and Date of Document	Purpose
	Ministry of Natural Resources & Energy (MNRE)	(ii) National Energy Policy, 2003	(ii) Ensuring that the development goals of the country are met through the sustainable supply and use of energy for the benefit of all the citizens of the country.
Health	Ministry of Health & Social Welfare	(i) Public Health Act, 1969 (ii) National Environmental Health Policy, 2002	(i) Makes provisions for public health, particularly communicable diseases, nuisances and other incidental matters. (ii) Improve health status of the Swazi people by providing preventive, promotional, rehabilitative and curative health services, which are relevant, socially acceptable, affordable and accessible to all.
Planning and Zoning	Ministry of Housing & Urban Development (MHUD) Ministry of Agriculture & Cooperatives (MOAC)	(i) The Town Planning Act, 1961 (ii) Urban Government Act, 1969 (iii) Control of Tree Planting Act, 1972	(i) An Act to make provision for the preparation and carrying out of town planning schemes. (ii) An Act to make provision for the establishment and regulation of urban authorities. (iii) The Act provide for the control of the planting of certain trees grown for commercial purposes in specified areas, and for matters incidental thereto.
Forestry	MOAC	(i) Private Forests Act, No 3 of 1951 (ii) Flora Protection Act, 2000 (iii) Forest Preservation Act, No 14 of 1910 (iv) Forest Policy, 2002 (v) Control of Tree Planting Act, No 7 of 1972	(i) The Act provides for the regulation of private forest in Swaziland. (ii) The Act repealed the Act of 1952 to provide for more effective protection of indigenous flora of Swaziland. (iii) To regulate trees and forestry development on government and Swazi nation land. (iv) To achieve efficient, profitable and sustainable management and utilisation of forest resources for the benefit of the entire society.
Mining and Mineral Resources	(MNRE)	(i) The Mining Act, No 5 of 1958 (ii) Explosives Act, No 4 of 1961	(i) The Act provides for the prospecting, mining and provision of mineral concessions.

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Information Required	Responsible Agency	Title and Date of Document	Purpose
Conservation	MTEC	(i) The Swaziland National Trust Commission Act, 1972 and Regulations (ii) Protected Places and Areas Act, No 13 of 1966	SNTC seeks to <i>inter alia</i> : <ul style="list-style-type: none"> • Preserve natural and cultural heritage; • Continue to develop nature conservation in the country; • Create awareness and educate the public on conservation of natural and cultural heritage; • Promote tourism relating to the natural and cultural heritage of the country; • Implementation of all activities relating to biodiversity conservation, including responsibilities as recognised by the Swaziland Environmental Authority and other government bodies; and • Implementation of other biodiversity related legislation.
Wildlife and Natural Resources	MNRE Kings Office	(i) Flora Protection Act, 2000 (ii) Wild Birds Protection Act, No 45 of 1914 (iii) Natural Resources Act, No 71 of 1951 (iv) The Game Act, 1953, as amended by the Game (Amendment) Act, 1991 (v) Plant Control Act, No 8 of 1981 (vi) Grass Fires Act, No 44 of 1955	(i) Identifies and lists protected species and permits required in respect of protected species. (ii) An Act to prohibit, with certain exceptions, the sale and exportation of the plumage and skins of wild birds and to provide for the protection of birds. (iii) An act to protect natural resources (with limited powers). (iv) An Act to amend the laws dealing with the preservation of game, and to provide for the preservation of other types of wild life in Swaziland.
Agricultural and Land	MNRE / MHUD / MOAC	Draft Land Policy, 199	Land Tenure Issues and Policies; Land Use and Land Management Issues and Policies; Land Market Issues and Policies; and Land Administration Issues and Policies.
Fisheries	MOAC	Protection of Freshwater Fish Act & Regulations, 1937	
Roads	Ministry of Works & Transport	Roads & Outspans Act, 1931	An Act to make provision for the establishment of public roads and outspans, and to provide for the establishment of road boards and other matters incidental thereto.

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Information Required	Responsible Agency	Title and Date of Document	Purpose
Human Resettlement, Compensation and Rehabilitation	Ministry of Housing & Urban Development (MHUD) MOAC	(i) Building & Housing Act, 1968 (ii) Crown Lands Act, 1949 (iii) Crown Lands (Temporary Occupation) Act, 1968 (iv) Human Settlements Authority Act, 1992 (v) National Housing Policy, 2001 (vi) Human Resettlement Policy, 2003 (vii) Rural Resettlement Policy	(i) An Act to provide for the control and safety of buildings. (ii) An Act to proclaim certain areas of land in Swaziland to be crown lands. (iii) An Act to make provision for the granting of permits for temporary occupation of certain crown lands, and to prevent the unauthorised occupation of, or encroachment on crown land. (iv) An Act to establish the Human Settlements Authority (v) 'All Swazi households should have access to affordable shelter and services'. (vi) To establish a sensible, effective strategic framework for sustainable land management and resettlement, correcting or preventing the often haphazard allocation of land to homesteads, cropping and grazing, so that arable land is not wasted, erosion is minimised and service provision is facilitated.
Archaeological, Historical and Cultural	Ministry of Tourism, Environment and Communication (MTEC) & SEA	The Swaziland National Trust Commission Act, 1972 and Regulations	SNTC seeks to <i>inter alia</i> : <ul style="list-style-type: none"> • Preserve natural and cultural heritage; • Continue to develop nature conservation in the country; • Create awareness and educate the public on conservation of natural and cultural heritage; • Promote tourism relating to the natural and cultural heritage of the country; • Implementation of all activities relating to biodiversity conservation, including responsibilities as recognised by the Swaziland Environmental Authority and other government bodies; • Implementation of other biodiversity related legislation.