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# MADAGASCAR

# CHAPTER 14: MADAGASCAR

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## 14 MADAGASCAR

### 14.1 Constitutional requirements for environmental protection in Madagascar

The Constitution of the Republic of Madagascar (2010) enjoins the public through local government structures (the Fokonolana and the lower-level Fokontany) to take appropriate measures to prevent the destruction and harm of their environment including loss of land, seizure of cattle or loss of ceremonial heritage, unless these measures jeopardise the common interest or public order (Article 39).<sup>1</sup> Article 41 states that:

*“The State guarantees the freedom of enterprise so long as it operates within the limits of the public interest, public order and the environment. In order to protect the natural and mineral resources of the country, the conditions of exploitation must be debated in advance by the National Assembly.”<sup>2</sup>*

The concept of sustainable development underpins all the environmental policy and legal documents. Decree No. 2004-167 relating to Ensuring the Environmental Suitability of Investments (Mise en Compatibilité des Investissements avec l’Environnement (MECIE) is founded on the notion of sustainable development recognising the needs of the present while safeguarding the needs of future generations. The three objectives of sustainable development to be achieved include the following:

- Maintenance of ecological integrity;
- Improvement of economic efficiency; and
- Improvement of social equity.<sup>3</sup>

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<sup>1</sup> ECOSOC (United Nations Economic and Social Council), 2007. *Implementation of the International Covenant on Economic, Social and Cultural Rights*. Report prepared by the Committee on Economic, Social and Cultural Rights. New York: United Nations.

<sup>2</sup> ECOSOC, 2007.

<sup>3</sup> Randriamiarana, H, 2006. *Présentation du Décret MECIE*. [www.pnae.mg](http://www.pnae.mg)

## **14.2 Institutional and administrative structure for environmental impact assessment in Madagascar**

### **14.2.1 Ministry of the Environment and Sustainable Development**

The Ministry of the Environment and Sustainable Development (MESD) was established by Decree No. 2019-026 of 2019 replacing the previous Ministry of Environment, Ecology and Forests. On the basis of the principles and provisions of the Environment Charter (Law No. 2015-003) and the international Conventions relating to the protection of the environment ratified by Madagascar, the MESD is responsible for the design, coordination, implementation, monitoring and evaluation of State policy on the environment, ecology and forest resources. The Ministry's mission is to *“Safeguard and value our environment and unique natural resources for the well-being of the Malagasy population and the sustainable development of the country”*.

In this capacity, the Minister is responsible for:

- Developing and/or updating policies, strategic and legal instruments to improve environmental, ecological and forest governance;
- Coordinating the consideration of the environmental dimension in development policies at sectoral and decentralised levels;
- Strengthening the fight against climate change with a view to a resilient economy with low carbon emissions;
- Consolidating the systems of environmental assessments;
- Promoting the prevention, awareness-raising, and research relating to the control of pollution of the air, water, soil and sea and their sources;
- Increasing the surface area of Protected Areas and ensuring the sustainability of their management and the promotion of biodiversity for the benefit of ecotourism development;
- Contributing significantly to the improvement of the living environment of the population;
- Reducing the process of degradation of natural resources;
- Improving the management of natural resources and ensuring their rational and transparent exploitation;
- Increasing forest area and potential;
- Ensuring the maintenance and enhancement of ecosystem services;
- Ensuring the control and monitoring of the use of natural resources;
- Ensuring that the population benefits from the sustainable and participatory management of protected areas, as well as the enhancement of biodiversity and natural resources;
- Mobilising citizens, the private sector, civil society, NGOs and technical and financial partners for better management of Madagascar's ecosystems;
- Reinforcing communication and environmental awareness education with the aim of changing attitudes to environmental conservation; and
- Promoting sustainable development in the country.

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In terms of Article 12 of Decree No. 2019-026, MESD, through the Secretary-General, exercises the administrative and technical supervision of the following bodies:

- National Office of the Environment (ONE);
- Madagascar National Parks;
- National Association for Environmental Actions;
- National Forest Seed Silo;
- National Centre for Training, Studies and Research in Environment and Forestry;
- Organisation Against the Occurrence of Marine Pollution by Hydrocarbons;
- National Observatory of Environment and Forestry Sector;
- Environmental Management Support Service; and
- National Training Centre for Forestry Technicians.

The powers devolving upon these technical supervisory authorities are conferred by the specific statutes of these public or semi-public institutions, which are variously responsible for the implementation of the National Environmental Action Plan and the forestry policy.

The organogram of the technical departments of the Ministry is shown in Figure 14.1. This shows three technical directorates that report to the Secretary-General:

- Directorate-General of Environment and Forests (DGEF);
- Directorate-General of Sustainable Development (DGDD); and
- Inter-regional and Regional Directorates of environment and sustainable development (Figure 14.1).

The mission of the Directorate-General of Environment and Forests (DGEF) is to protect, enhance and take care of the environment and forest resources.<sup>4</sup> It is responsible for the design and coordination of technical activities in accordance with the Government of Madagascar's Policy on Environment and Forest Resources Management and the monitoring and control of its implementation.

The DGDD's mission is to promote the consolidation of favorable conditions for the implementation of the Sustainable Development Goals (SDGs)<sup>5</sup>. It is responsible for coordinating the interventions of the different sectors towards the achievement of the SDGs.

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<sup>4</sup> Article 17 of Decree 2019-026

<sup>5</sup> Article 21 of Decree 2019-026

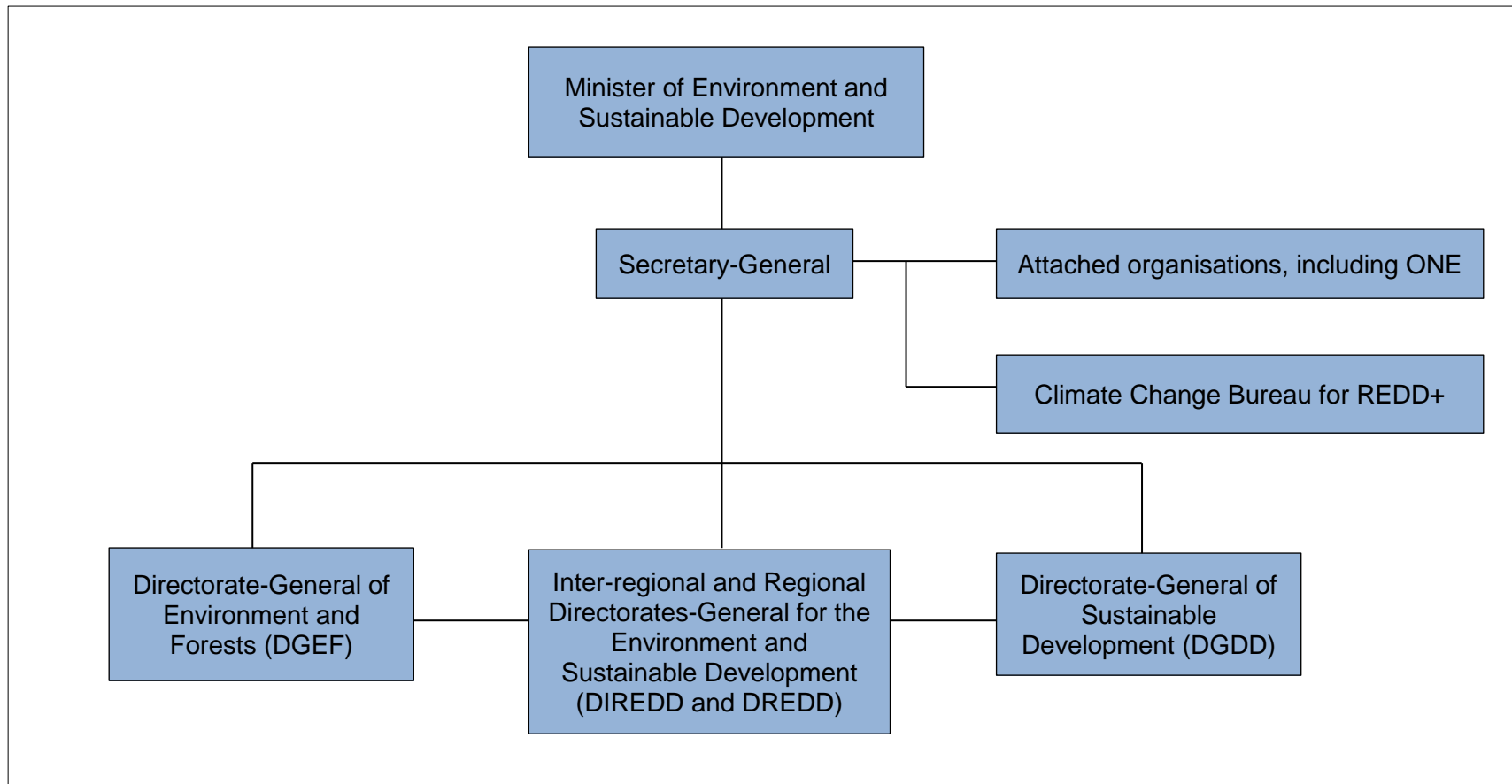


Figure 14.1: Simplified organogram of the technical directorates of the Ministry of Environment and Sustainable Development

The Inter-Regional Directorates for the Environment and Sustainable Development (DIREDD) and the Regional Departments for the Environment and Sustainable Development (DREDD) represent the Ministry at the level of the Regions. They are attached to the General Secretariat while having hierarchical links with the Directorate-General of Environment and Forests and the Directorate-General for Sustainable Development (Figure 14.1). As such, they are required to report to the two Managing Directors respectively according to the subject of the file to be processed. They are in charge of the implementation of the environmental, forestry and sustainable development policy at the level of the Regions, in cooperation with the Decentralised Territorial Communities, the NGOs, the private sector, local Associations, and local communities.<sup>6</sup>

The environmental impact assessment (EIA) process is administered by the National Office of the Environment (ONE).

#### 14.2.2 National Office for the Environment

The National Office for the Environment (ONE) is one of the attached organisations reporting to the Secretary-General of MESD as shown in Figure 14.1. It was set up specifically to administer the Decree MECIE and was formalised in terms of Decree No. 2008-600 of 23 June 2008. Its stated mission is to ensure that economic activities and development are not detrimental to the environment. This is carried out through a number of interventions including: the development and management of the EIA processes set out in Decree MECIE; the management and prevention of pollution; the monitoring of the marine and terrestrial environments to better manage the unique biodiversity of Madagascar; the dissemination of environmental information and tools; environmental awareness training; development of standards and guidelines (with other technical ministries) as well as the preparation of national and regional State of Environment reports.<sup>7</sup>

ONE's main tasks in relation to EIA include:

- Coordination of the EIA process;
- Coordination of the work of the *ad hoc* Technical Evaluation Committee (Comité Technique d'Evaluation (CTE));
- Monitoring of the implementation of environmental management plans (EMP) and the imposition of sanctions and penalties for non-compliance;
- Coordination of the evaluation of environmental audits;
- Promotion of Strategic Environmental Assessment (SEA);
- Management of a geographic information system;
- Issuing Environmental Permits;
- Issuing Environmental Closure Certificates on project closure.<sup>8</sup>

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<sup>6</sup> Article 26 of Decree 2019-026

<sup>7</sup> [www.pnae.mg](http://www.pnae.mg)

<sup>8</sup> <https://www.pnae.mg>

### **14.2.3 Technical Evaluation Committee**

The Technical Evaluation Committee (TEC) is an *ad hoc* committee constituted by ONE, which is charged with the evaluation of the EIA dossier before permits are granted. It comprises members of the line ministry environmental units (see section 14.2.4) and representatives of the sector ministries, the MESD and ONE. However, this Committee may not always have the required expertise, particularly relating to issues such as social, economic, gender and health.<sup>9</sup>

### **14.2.4 Inter-sectoral cooperation**

Other line ministries responsible for development in their sectors are expected to participate in the EIA process and to control and monitor the implementation of the EMP. To achieve effective implementation of this, Decree No. 2003-439 of 27 March 2003 provides the framework for the establishment of an environmental unit in each sector ministry that directly affects the environment. Environmental units have been developed within certain sector agencies, such as the Ministry of Agriculture, Ministry of Fisheries and the Ministry for Mines- but these units function with varying degrees of effectiveness.<sup>10</sup> The environmental units are responsible for evaluating and approving the Programme of Environmental Engagement (Programme d'Engagement Environnemental (PREE)) and for the integration of the environment into sector policies in order to ensure sustainable development.

There is a provision in the Environment Charter for an Inter-ministerial Committee for the Environment, but it is not functional.<sup>11</sup>

## **14.3 Policy and legal framework for EIA in Madagascar**

### **14.3.1 National Environmental Policy for Sustainable Development**

The Annex of Decree No. 2015-1308 of 22 September 2015 sets out the National Environmental Policy for Sustainable Development. This Policy aims to be the national reference for environmental management, incorporating the national objectives as appropriate and those of international concern such as the Sustainable Development Goals and international conventions.

This policy is consistent with the general principles contained in the 2015 Malagasy Environment Charter and takes into account the global and inter-dependent nature of environmental, social, economic and cultural problems. It places man at the centre of environmental concerns. The main issues confronting the country, which are addressed in the Policy are:

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<sup>9</sup> Institut de la Francophonie pour le Développement Durable (2019). Cartographie de l'évaluation environnementale et sociale dans la Francophonie. Under the direction of Revéret, J-P and Ngo-Samnack E.L. ISBN (electronic): 978-2-89481-291-4

<sup>10</sup> The World Bank (2013). Madagascar Country Environmental Analysis.

<sup>11</sup> Op. cit. Footnote 9



- The sustainable management of natural resources to provide food security and energy in the face of population growth and climate change;
- The preservation of globally unique, but threatened biodiversity;
- The effective management of marine and coastal areas over a total coastline of almost 5,600 km;
- The reduction of environmental and health risks arising from various forms of pollution caused by economic and social development;
- The rational utilisation of wetlands and rivers which provide essential ecosystem services and fresh water;
- The need for the general public to adhere to the environmental policies of the country by changing attitudes to sustainable development and becoming 'eco-citizens'.

EIA is identified as one of the key tools that can be used to address some of these pressing issues.

#### **14.3.2 Climate change policies and programmes**

Madagascar has a number of policies and programmes relating to climate change, notably:

- The National Programme of Action and Adaptation to Climate Change, 2006;
- The National Appropriate Mitigation Action Plan (2010);
- The National Policy on the Fight against Climate Change, 2010.

The latter has five strategic pillars namely:

- Reinforcement of adaptation actions against climate change taking into account the true needs of the country;
- Implementation of attenuation actions for the benefit of country development;
- Integration of climate change at all levels of government and society;
- Development of financial instruments to promote green growth; and
- Promotion of research, development and transfer of technology and adaptive management techniques.

The country has also adopted the United Nations REDD+ project. All these programmes fall under the National Bureau for Climate Change which reports to the Secretary-General of MESD as shown in Figure 14.1.

#### **14.3.3 Environment Charter**

The Environment Charter (Charte de l'Environnement) was promulgated as Law 2015-003 of 19 February 2015. This new law (replacing Law No. 90-033 of 1990 as amended) establishes the modalities of compatibility of investments with the environment contained in Decree MECIE (see s. 14.3.4 below). This framework law deals with EIA, SEA, public hearings and environmental audits, but does not explicitly address cross-cutting issues such as risk assessment, cumulative impact analysis, health impact assessment, indigenous peoples, life cycle analysis and sustainability

assessments. The Environment Charter defines the environment as *“the assemblage of natural and man-made environments including the human environment and the social and cultural factors relevant to national development.”*

The Environment Charter (2015) sets out the general and specific environmental principles which underlie the law:

- Article 5 describes the environment as being a major priority issue for Madagascar and that environmental management is in the general interests of the whole country. It obliges the State to provide the necessary resources for the effective management of the environment and the implementation of environmental policies. It recognises the importance of international cooperation to support some of the national environmental programmes and the need for environmental issues to be internalised at all levels of government and society;
- Article 6 states that all persons have the fundamental right to live in a clean and healthy environment;
- Article 7 gives all persons the right to access information about the environment and to participate in decision-making where it may affect them;
- Article 8 makes it the duty of every person to protect the environment in which s/he lives;
- Article 9 requires anyone who causes damage to the environment to be held liable for the repairs and rehabilitation of such damage;
- Article 10 contains the polluter pays principle ;
- Article 11 relates to the precautionary principle;
- Article 12 deals with risk prevention;
- Article 13 states that an EIA is required for listed projects (see below);
- Article 14 states that everyone has the right to participate in the EIA process and to make comments;
- Article 15 enables the State to assign responsibility for the environment to the relevant authorities; and
- Article 16 promotes the concept of the equitable distribution of costs and benefits and provides a system of recourse in the case of conflicts with the principles of the Environmental Charter (listed here).

Article 13 makes provision for EIAs by stating that all public or private investment projects that may have an impact on the environment must undertake an impact study, taking into account the technical nature, scale and magnitude of the project, as well as the sensitivity of the receiving environment. Investment projects submitted for authorisation or approval by other administrative authorities are also subject to an EIA under the same conditions as other projects.

#### **14.3.4 Decree MECIE**

The Decree relating to the Compatibility of Investments with the Environment, commonly referred to as Decree MECIE<sup>12</sup> has evolved over time and has been repealed and/or amended several times since it was first promulgated in 1992. The latest version is Decree No. 2004-167 of 3 February 2004. Decree MECIE is divided into six chapters and three annexes, as follows:

- Chapter 1: General arrangements and definition of terms
- Chapter 2: Rules and procedures relating to:
  - EIA process
  - Evaluation and review procedures
  - Public participation
- Chapter 3: Monitoring and control
- Chapter 4: Offences and penalties
- Chapter 5: Transitional arrangements
- Chapter 6: General arrangements relating to particular modalities of application in certain sectors
- Annex I: Description of projects that require an EIA
- Annex II: Description of projects that require a PREE
- Annex III: Fees

#### **14.3.5 Related orders, technical directives and guidelines**

The legal instruments and tools which support the operation of MECIE are listed below:

- Order No. 4355-97 of 13 May 1997 on the designation of sensitive zones. In terms of Article 2 of this Order, sensitive zones are defined as one or more elements of the environment characterised by specific values or fragility which may be vulnerable to human activities and susceptible to natural phenomena, such that the environment may be modified and/or degraded. Article 3 defines the sensitive zones as being: coral reefs, mangroves, islets, tropical forests, erosion zones, arid and semi-arid areas susceptible to desertification, swamps/wetlands, nature conservation areas, zones surrounding drinking water supply sources (including underground sources) and palaeontological sites;
- Order No. 6830-2001 of 28 June 2001 sets out the procedures and methods of public participation in EIA (see section 14.4.5);

Other relevant legislation pertaining to the environment is listed in Table 14.6 in s. 14.5.

A number of Environmental Technical Directives have been adopted, relating to: Conducting an EIA (July 2000) in French and English; and Environmental Evaluation.

Madagascar also has sector EIA guidelines for tourism, roads, aquaculture, on- and offshore petroleum developments, textiles, forestry, mines, agro-fuels, agriculture, wetlands, new protected

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<sup>12</sup> Décret relative à la Mise en Compatibilité avec des Investissements avec l'Environnement (MECIE)

areas, and sensitive areas. There are also guidelines on the following aspects of environmental assessment generally:

- Social Impact Assessment;
- Best Practice Guidelines for SEA (2005);
- Integration and Adaptation to Climate Change in Land Planning Using SEA (February 2019);
- Compliance monitoring; and
- Environmental auditing.

#### 14.3.6 Permits and licences

In terms of Article 27 of MECIE 2004, ONE will grant (or reject) an **Environmental Permit** based on the environmental review of the EIA, a public evaluation report, and technical advice from the TEC. The permit will be inserted into all applications, approvals and agreements for all construction projects. Projects that only require a Programme of Environmental Engagement (PREE) receive an Environmental Approval or a Certificate of Conformance from the environmental unit in the responsible sector ministry.

#### 14.3.7 Offences and penalties

The offences that can be committed under MECIE are set out in Article 34 of the Decree and are summarised in Table 14.1. The penalties will be determined by ONE, together with the sector ministry and the affected community, from the list shown in the table.

**Table 14.1: Offences and penalties**

Offence	Penalty
Non-compliance with the EMP	<ul style="list-style-type: none"> <li>▪ Injunction to restore the environment to its natural condition;</li> <li>▪ Injunction to proceed, within a predetermined time, to implement corrective measures and compensation;</li> <li>▪ Suspension or withdrawal of the Environmental Permit. Once this has occurred, the responsible sector ministry can:               <ul style="list-style-type: none"> <li>▪ Stop all work;</li> <li>▪ Suspend the activities in terms of Article 2 of MECIE; and/or</li> <li>▪ Order the temporary or permanent closure of the establishment.</li> </ul> </li> </ul>
Carrying out any development or construction works for a project listed in Annex I without an Environmental Permit	
Carrying out any development or construction works for a project listed in Annex II without the approval of a PREE	
Failing to carry out corrective actions and/or paying the prescribed compensation	
Failure or partial failure to carry out the detailed measures prescribed in MECIE	

#### 14.3.8 Fees

All developers are required to pay a fee for the review of the EIA and the monitoring of the EMP. The fee includes the costs associated with the environmental units in the sector ministries, the fees of experts used to assist with the review or monitoring of the project, and the fees and costs incurred

by the members of the TEC and by the public enquiry and/or public hearing.<sup>13</sup> The fee schedule is shown in Table 14.2.

**Table 14.2: Fees to be paid for EIA review and EMP monitoring**

Value of Investment	Fee
Less than FMG10 billion	0.5% of capital cost of investment
FMG10 – 25 billion	FMG10 million or 0.4% of the capital cost
FMG25 – 125 billion	FMG35 million or 0.3% of the capital cost
FMG125 – 250 billion	FMG160 million or 0.2% of the capital cost
More than FMG250 billion	FMG410 million or 0.1% of the capital cost

### 14.3.9 Environmental standards

The proponent of a project must demonstrate how s/he will conform to the environmental standards in force at the time of the application. Decree No. 2003-464 of 15 April 2003 sets out the effluent quality standards that must be adhered to before discharge into surface waters. These are specified in Article 5 of the Decree and repeated in Table 14.3 below. The minimum standards for metals in sewage sludge are stipulated in Article 10 and shown in Table 14.4, while the standards for soil onto which sewage sludge is discharged are shown in Table 14.5. The methods of analysis that should be used are set out in the Annex to the Decree.

<sup>13</sup> Annex 3 of Decree No. 99-954 of 1999 as amended by Decree No. 2004-167 of 3 February 2004 (MECIE).

Table 14.3: Discharge standards for liquid effluents

Determinants	Units	Standard
<b>Physical</b>		
pH		6.0 – 9.0
Conductivity	µS/cm	200
Suspended solids	mg/l	60
Temperature	°C	30
Colour	Pt/Co	20
Turbidity	NTU	25
<b>Chemical</b>		
Hardness as CaCO <sub>3</sub>	mg/l	180
Ammoniacal nitrogen as N	mg/l	15
Nitrate as NO <sub>3</sub>	mg/l	20
Nitrite as NO <sub>2</sub>	mg/l	0.2
Kjeldahl nitrogen as N	mg/l - N	20
Phosphate as PO <sub>4</sub>	mg/l	10
Sulphate as SO <sub>4</sub>	mg/l	250
Sulphur as S	mg/l	1
Oil and grease	mg/l	10
Phenol	mg/l	1
Polycyclic aromatic hydrocarbon (PAH)	mg/l	1
Free chlorine	mg/l	1
Chloride as Cl	mg/l	250
<b>Biological</b>		
Chemical oxygen demand (COD)	mg/l	150
Biological oxygen demand (BOD)	mg/l	50
<b>Undesirable elements</b>		
Aluminium as Al	mg/l	5
Arsenic as As	mg/l	0.5
Cadmium as Cd	mg/l	0.02
Hexavalent chromium as Cr <sup>vi</sup>	mg/l	0.2
Total chrome as Cr	mg/l	2
Iron as Fe	mg/l	10
Nickel as Ni	mg/l	2
Lead as Pb	mg/l	0.2
Tin as Sn	mg/l	10
Zinc as Zn	mg/l	0.5
Manganese as Mn	mg/l	5
Mercury as Hg	mg/l	0.005

Determinants	Units	Standard
Selenium as Se	mg/l	0.02
Cyanide as CN	mg/l	0.2
Aldehyde	mg/l	1
Aromatic solvents	mg/l	0.2
Nitrogen-based solvents	mg/l	0.1
Chloride-based solvents	mg/l	1
Organo-chloride pesticides	mg/l	0.05
Organo-phosphate pesticides	mg/l	0.1
Pyrethrinoids	mg/l	0.1
Phenylpyrazoles	mg/l	0.05
Total pesticides	mg/l	1
Antibiotics	mg/l	0.1
Polychlorobiphenyls (PCBs)	mg/l	0.005
Radioactivity	Bq	20
<b>Microbiological</b>		
Total coliforms	Number	500
<i>Escherichia coli</i>	Number	100
Faecal <i>streptococci</i>	Number	100
<i>Clostridium</i>		100

NTU: nephelometric turbidity units

**Table 14.4: Sewage sludge standards**

Element	Maximum concentration (mg/kg dry matter)	Maximum per kg/ha/10 years
Cadmium as Cd	40	1.5
Chromium as Cr	2 000	45
Copper as Cu	2 000	120
Mercury as Hg	20	1
Nickel as Ni	400	30
Selenium as Se	200	1
Zinc as Zn	8 000	300
Cr+Cu+Ni+Zn	8 000	120

**Table 14.5: Soil limits for sewage sludge disposal**

Element	No sewage sludge to be disposed of on soils where metal concentrations exceed the following (mg/kg of dry material)
Cadmium as Cd	3
Chromium as Cr	200

Copper as Cu	140
Mercury as Hg	1.5
Nickel as Ni	75
Lead as Pb	300
Selenium as Se	10
Zinc as Zn	300

In the event that there are no national standards available, such as for noise or air quality, the proponent must comply with internationally recognised standards developed by international organisations affiliated to the United Nations. Where there are several standards available for use, the proponent must provide justification for his/her choice in the EIA.<sup>14</sup>

#### 14.3.10 Certification of EIA consultants

There is no certification system for environmental assessment practitioners in Madagascar. The guidelines merely encourage the proponent to use recognised scientific experts in conducting the EIA,<sup>15</sup> and the names, professions and functions of each EIA team member must be provided in an annex to the EIA report.

#### 14.4 EIA procedural framework in Madagascar

An EIA is defined in Article 2 of MECIE as *“a study that consists of scientific analysis and prediction of potential impacts of an activity on the environment, and the examination of the acceptability of their significance, as well as the mitigation measures proposed to ensure environmental integrity, within the limits of best available technology at an acceptable cost”*.

The aims of the EIA are identified as follows:

- Ensure the optimal integration of environmental considerations and the best utilisation of resources and land;
- Consider environmental issues at all phases of the project life cycle, from conception through implementation and operations to closure;
- Predict and determine the positive and negative ecological and social consequences of a project;
- Identify measures to mitigate or compensate for the negative impacts;
- Identify alternatives or variations to the project, which may be less damaging to the environment and which satisfy the project objectives as well as the interests of all parties concerned; and

<sup>14</sup> Para 1.2.4 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar (Directive Générale pour la Réalisation d'une Étude d'Impact Environnemental à Madagascar).

<sup>15</sup> Para 1.4 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.



- Take into account the opinions, reactions and interests of all parties concerned, in particular individuals and communities within the project area.<sup>16</sup>

#### **14.4.1 Screening**

At the outset, a project developer must determine whether the project requires an EIA, a PREE or a Compliance Certificate (see Figure 14.2).

##### **Environmental impact assessment**

The public or private investment projects that require an EIA are set out in Article 4 and Annex I of MECIE (shown in Appendix 14-1 of this chapter). An EIA is mandatory for:

- All developments, construction and works that could affect sensitive environments as defined in Order No. 4355-97 (see s. 14.3.5 for definition);
- The types of developments listed in Annex I (Appendix 14-1); and
- Any other activity, not located in a sensitive area, but which by its nature, size and scale could cause a negative impact on the environment (as determined by ONE) and which is not listed in Annex I.

##### **Programme of Environmental Engagement**

In terms of Article 5 of Annex II of MECIE, a developer of a private or public investment project that is listed in Annex II of MECIE (Appendix 14.2 of this Chapter) must submit a brief project description to ONE, who will then screen the project and determine whether a PREE is acceptable.<sup>17</sup>

##### **Compliance Certificate**

This applies to enterprises that were in existence on the date of Decree MECIE in 2004 and that are listed in Article 4 of the Decree (i.e. those projects that require an EIA).

#### **14.4.2 Environmental impact assessment**

The General Directive for the Implementation of an Environmental Impact Study in Madagascar sets out in detail the form and content of an EIA. The EIA must be undertaken by the proponent or a consultant on behalf of the proponent, according to the following steps.

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<sup>16</sup> Para 1.1 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

<sup>17</sup> Article 5 and Annex 2 of MECIE 2004.

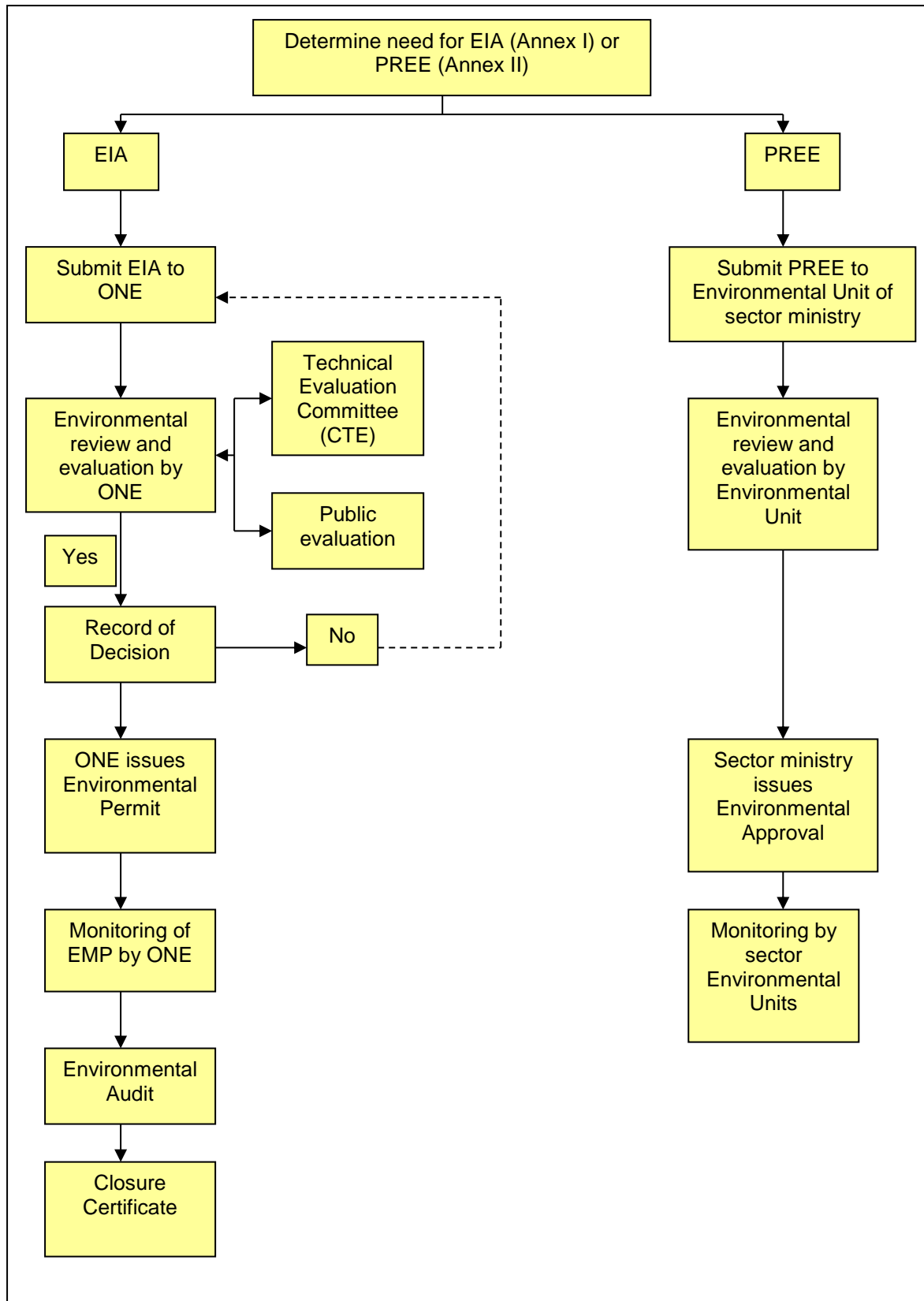


Figure 14.2: EIA process in Madagascar

**Context of the project:** This chapter should include: details and experience of the proponent; the proponent's environmental and sustainable development policies, if available; the name of the company undertaking the EIA; an overview of the project and its location; and a detailed motivation and justification for the project, including the major opportunities and constraints.<sup>18</sup>

**Technical description of the project:** The aim of this section is to present a detailed description of each project phase and the activities associated with each phase. The description should include: the proposed use of natural resources, methods of exploitation and treatment, production rates, and pollution and emissions expected, taking into account the environmental standards being applied. The chapter should identify all impacts associated with each project activity. The proponent is referred to the sectoral guidelines listed in section 14.3.5 of this Handbook and the responsible line ministry.<sup>19</sup>

**Description of the receiving environment:** The aim of this section is to describe the baseline receiving environment in the zone of influence of the project. The environment is seen to include physical, biological, social, economic and cultural elements. This chapter of the EIA should include a detailed delimitation of the actual project site; the position of all ancillary and associated structures, such as access roads and pipelines; as well as the surrounding areas that may be affected by the project, such as air pollution deposition zones and socio-economic structures. It must also provide a detailed description of the most important environmental components. Data can be obtained either through literature surveys or, where basic data is lacking, through site surveys carried out by a multi-disciplinary team of experts using proven scientific methods.

The baseline environmental description should include information on: geology, topography, soils, hydrology, terrestrial and aquatic ecosystems, vegetation, fauna, social structures and demographics, economic systems and activities, and the cultural environment. The study must also be placed into the context of spatial planning initiatives, policies and other schemes and developments.<sup>20</sup>

**Alternatives analysis:** The objective of this step is to demonstrate that the proposed project is the best option of all possible alternatives from a technical, economic and environmental perspective. To this end, the EIA should include a detailed assessment of all site, route and design alternatives and provide a justification for the preferred options based on an objective assessment of each.<sup>21</sup>

**Analysis of impacts:** This chapter must include three sections as follows:

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<sup>18</sup> Para 2.1 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

<sup>19</sup> For a complete list, see paragraph 2.2 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

<sup>20</sup> Detailed lists of factors to consider in the environmental description are included in Annex 2 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

<sup>21</sup> Para 2.4 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

- Identification of potential impacts on the receiving environment for each activity in each project stage;
- Evaluation of the impacts, including an analysis of the intensity or magnitude, scale, duration, frequency and probability of each impact, confidence levels in each prediction, the value of compensation for affected populations, health and safety risks, and exposure pathways; and
- Identification of mitigation measures to prevent, suppress or reduce negative impacts or to maximise the benefits of the project on the environment. The mitigation measures must be identified for each impact in each project phase and must include the required actions to achieve the desired results. If it is not possible to reduce the negative impacts sufficiently, then it will be necessary to identify suitable compensation measures, such as resettlement packages. The proponent is required to identify the costs associated with the proposed mitigation measures.

The study must present the methodology used to determine the impacts, including clearly defined criteria for ascertaining significance and importance.<sup>22</sup>

**Risk assessment:** The EIA must include a risk assessment, especially for heavy industrial and infrastructure projects where there is a risk of accidents that could pose a danger to environmental quality and human health. In these instances, the EIA report must identify the risks and present a detailed emergency plan to deal with each risk.<sup>23</sup>

**Project synthesis:** This chapter must present a synthesis of the project after all mitigation and compensation measures have been applied, detailing the residual impacts.<sup>24</sup>

**Environmental management plan:** The EMP should provide an environmental monitoring and follow-up programme, which must be implemented during each phase of the project life cycle. This section of the EIA forms the basis of the Record of Decision. The EMP must be based on the mitigation hierarchy and should contain at least the following components:

- A list of all legislative requirements that have been taken into account in the project;
- A description of the envisaged performance and design criteria for all equipment and installations;
- A description of the measures and methods proposed to protect the environment;
- An evaluation of dangers and the proposed methods of prevention and protection to safeguard the environment;
- The interventions undertaken by the proponent to apply the mitigation measures to the negative impacts of the project;

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<sup>22</sup> Para 2.5 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

<sup>23</sup> Para 2.6 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

<sup>24</sup> Para 2.7 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

- A programme for the implementation of all mitigation measures; and
- The mechanisms and frequency of sending monitoring reports to the competent authorities (ONE and other sector ministries).

It is expected that the monitoring programme will be revised periodically based on the effectiveness of the mitigation measures after implementation of the project.

The follow-up programme aims to validate the impact predictions made in the EIA and to assess environmental performance of the project and the effectiveness of the mitigation measures.<sup>25</sup>

The EIA report should contain the following:

- Executive summary
- Table of contents
- Lists of tables, figures and diagrams
- Introduction
- Context and justification for the project
- Description of the receiving environment
- Description of the project
- Analysis of the project alternatives
- Risk assessment
- Project synthesis
- EMP
- Conclusions
- References
- Annexes containing: a list of the EIA study team, including name, profession and position on the team; maps; notices of public meetings and details of the public consultation programme; methods and results of all surveys and sampling programmes; and any other information that will assist informed decision-making on the project.

In addition, the EIA documents must include the title deeds or other proof of ownership or tenure of the site for the proposed project, as well as a non-technical summary in Malagasy and French. The main document must also be written in Malagasy or French.

The environmental dossier (all the documents described above) must be submitted to ONE, together with:

- A written request by the proponent addressed to the Director-General of ONE to carry out an environmental review;
- Seven copies of the EIA report and one electronic version;
- Seven copies of the non-technical summary in French and Malagasy;

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<sup>25</sup> Para 2.8 of the General Directive for the Implementation of an Environmental Impact Study in Madagascar.

- Receipt of payment of the review fees;
- Certified statement of the capital costs of the project.

#### **14.4.3 Programme of Environmental Engagement**

All investment projects listed in Annex II of the Decree MECIE, 2004 (see also Appendix 14-2) must submit a PREE (see Figure 14.2). According to Article 5 of MECIE, 2004, the PREE must conform to the contents, format and substance to be defined in forthcoming regulations. The environmental unit in the sector ministry concerned will evaluate the PREE and send its report and opinion to the Minister in charge of Environment and ONE. Approval of the PREE is a mandatory requirement before construction.

#### **14.4.4 Review of EIA report**

Once ONE has received the environmental dossier, the evaluation and review process commences (see Figure 14.2). The tasks include:

- Analysing the acceptability and completeness of the documents;
- Assembling the *ad hoc* TEC;
- Technical review of the documents by the TEC;
- Organising the review by the public and local authorities (see s. 14.4.5 below);
- Visiting the site for familiarisation and observation of the environment and cross-checking aspects contained in the EIA;
- Requesting the proponent to provide additional information;
- Obtaining technical advice and opinions from the sector ministries responsible for the project;
- Issuing the Record of Decision or refusing to grant the Environmental Permit (with or without conditions);
- Closing audit at the end of the project's life and issuance of an Environmental Clearance Certificate.

Decisions are based on national standards and guidelines as well as international standards such as the environmental and social safeguards of development finance institutions (see also Chapter 2 of this Handbook).

#### **14.4.5 Public participation process**

The basis for public participation in environmental decision-making is found in Article 7 of the Environmental Charter, which states that "*all persons have a right to access information about the environment and to participate in decision-making which could adversely affect their environment.*"

The involvement of the public in the EIA review process is carried out through document review and a public enquiry or survey, or through a public hearing. The results of the public evaluation are an integral part of the EIA. Based on the methods specified in Order No. 6830-2001, ONE takes the decision on the method of public involvement. The proponent is notified at least seven days before the start of the public evaluation.<sup>26</sup> The public participation process is organised by ONE, which has the following role:

- Advise the Mayor of the local authority of the proposed project location (in their area);
- Make the non-technical summary of the EIA available to the public in French and Malagasy;
- Set up a register for all those who wish to make comments or suggestions on the project or report;
- Allow access to all the EIA documents by interested parties on demand;
- Organise at least one meeting with the project proponent and the public.

The local Mayor on his/her part, must inform the public (especially those directly affected by the proposed project) using appropriate means, about the project, the availability of the documents and any meetings to be held. The Mayor is also responsible for taking and distributing the minutes of the meeting.

The proponent (and his/her) team will be expected to give a succinct presentation of the project and respond to questions.

The methodology for document review is set out in Order No. 6830-2001. The consultation process must extend for a period of no less than ten days and no more than 30 days.<sup>27</sup>

The public enquiry or survey comprises the canvassing of public opinion by an environmental interviewer, carried out in collaboration with the relevant local authorities. The methods of engagement are set out in Order No. 6830-2001. The public enquiry must extend for a period of no less than 15 days and no more than 45 days.<sup>28</sup> It can occur simultaneously with the document review process described above.

The public hearing process is described in Articles 20 and 21 of the Decree MECIE, 2004, and Order No. 6830-2001. The public hearing is chaired by a Commission of Enquiry and comprises the simultaneous consultation with interested parties and can occur in addition to the two forms of consultation described above. The public hearing process must extend for a period of no less than 25 days and no more than 60 days.

#### **14.4.6 Appeals**

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<sup>26</sup> Article 15 of Decree MECIE, 2004.

<sup>27</sup> Articles 16 and 17 of Decree MECIE, 2004.

<sup>28</sup> Articles 18 and 19 of Decree MECIE, 2004.

Anyone aggrieved by a decision made by ONE may request the Minister of Environment to re-examine the dossier of documents. The Minister may appoint one or more experts to assist him/her in the review, which must be undertaken and a report submitted to ONE within 30 days. On receipt of the Minister's report, ONE has ten days to reconsider its Record of Decision and to announce whether it will issue the Environmental Permit. If not, the Minister could issue the permit.<sup>29</sup>

#### **14.4.7 Environmental monitoring and control**

Chapter III of Decree MECIE, 2004, sets out the requirements for environmental monitoring and control. The aim of environmental monitoring is to verify the effectiveness of the mitigation measures in preventing or minimising negative impacts on the environment. This ensures that the proponent of the project will respect all the obligations of the EMP throughout the life of the project. Any evidence of non-compliance can lead to the imposition of penalties by the authorities.

The proponent may be required to take additional measures or apply new standards, should the current measures be deemed ineffective. The competent authority that granted the Environmental Permit will make this decision.

Before project closure, the proponent is required to carry out an environmental audit according to the methodologies set out in the applicable technical directives. The audit must be submitted to ONE for evaluation and the granting of an Environmental Closure Certificate, which would then relieve the proponent of any further responsibility for the environment.

#### **14.3.8 Strategic Environmental Assessment**

Strategic Environmental Assessment (SEA) *per se* is not mentioned in Decree MECIE, but according to Annex 1 of MECIE and the Environmental Charter of 2014, all plans, programmes or policies which could modify the natural environment or the utilisation of natural resources and/or affect the quality of the human environment, both urban and rural, must be subjected to an environmental assessment (and thus comply with the procedures and reporting requirements set out above). Furthermore, ONE has encouraged each region to mainstream environmental management into all its Regional Development Plans and to produce regional environmental policies in an effort to promote a more strategic approach to planning.

#### **14.5 Other relevant environmental legislation in Madagascar**

Environmental issues cut across a variety of sectors, and numerous pieces of legislation in Madagascar have a bearing on the environment and should be considered in EIA decision-making. An *ad hoc* approach has typically been adopted for the development of new legislation and has led to a large number of instruments that have a narrow focus. The situation has been exacerbated by the fact that there is generally weak technical capacity in the drafting of legislation and limited

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<sup>29</sup> Article 28 of Decree MECIE, 2004.



physical access to existing legal instruments.<sup>30</sup> 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 requirements**

Sector	Primary agency	Title and date of document	Purpose
Water resources (use of)	Ministry of Energy, Water and Hydrocarbons	Law No. 98-029 of 20/01/99	Embodies the Water Code
		Decree 2003-191	Creating and organizing water basin agencies
		Decree 2003-192	Related to the organization, mandate and functioning of the National Authority of Water and Sanitation
		Decree 2003-464	Related to the classification of surface water and governing industrial emissions
		Decree 2003-941	Relates to monitoring of water, control of water for human use and priorities for access to water
Effluent disposal	Ministry of Energy, Water and Hydrocarbons	Articles 16–18 and 20–22 of Law No. 98-029	The Articles pertain to wastewater and effluent disposal.
		Law No. 99-021 of 19 August 1999	The Law relates to the management policy and control of industrial pollution.
		Decree No 2003-464 of 15 April 2003	Sets out the effluent quality standards.
Planning and zoning	Local authorities	Alignment authorisation (Autorisation d'alignement)	A request for a building alignment approval is to be made to the local authority. A fee will be levied, which has to be paid at the time of the request. Approval takes about a month.
		Building permission	Applications must be made to the local authority; it takes about three months.
		Decree 2010-137	Relates to the need for integrated coastal zone planning and management
		Law No. 2015-051 of 3 February 2015	This land planning law enables a balanced distribution between the population and developmental activities; coordinates actions between the public and private sectors regarding social and economic developments; specifies the need for adaptive management in certain areas.

<sup>30</sup> World Bank, 2013

Sector	Primary agency	Title and date of document	Purpose
			Article 48 specifically refers to the need for integrated development planning.
Natural resources	Local courts (DINAs)	Law No. 96-025 of 30 September 1996, as amended by Law No. 2000-027 of 13 January 2000	The Law relates to the local management of renewable natural resources by all rural communities.
Fisheries and aquaculture	Ministry of Agriculture, Stock Farming and Fisheries	Ordinance No. 93-022 of 4 May 1993	The Ordinance contains regulations on fishing and aquaculture practices.
Forestry	MESD	Law No. 97-017	The Law relates to the revision of forestry legislation.
		Law No. 97-1200	The Law relates to the adoption of Forestry Policy.
		Order No. 18177-04 of 27 September 2004	The Order sets out definitions and delimitation of sensitive forest areas.
		Order No 19560 of 18 October 2004	Suspends the granting of forestry permits in areas reserved for conservation.
Conservation	MESD	Law No. 2015-005 Management of Protected Areas	The Law sets out the classes of protection, the basis for protection, and the procedures that need to be followed to proclaim a protected area.
		Order No. 4355/97 of 13 May 1997	The Order sets out definitions and delimitation of sensitive environments.
		Decree No. 2006-541	The Decree relates to the ratification of the Bonn Convention on the conservation of migratory species.
Biodiversity	MESD	Law No. 2005-018 of 17 <sup>th</sup> October 2005	Relates to the illegal exploitation and commercialisation of environmental resources and biodiversity (based on the obligations of CITES).
		Order No. 4355-97 of 13 May 1997	Defines the sensitive areas.
Tourism	Ministry of Transport, Tourism and Meteorology	Law No. 95-017 of 25 August 1995	The Law contains the Tourism Code.
		Decree No. 96-1293 of 30 December 1996	The Law relates to the creation and management of areas of tourist interest.
Cultural heritage	Ministry of Communications and Culture	Ordinance 82-029 of 6 November 1982	Relates to the safe-keeping, conservation and protection of national cultural heritage.
		Law No. 2005-006 of 14 July 2005	Sets out the policy on culture.

Sector	Primary agency	Title and date of document	Purpose
Agricultural and land	Ministry of Agriculture, Stock Farming and Fisheries	Law No. 2003-029 of 27 August 2003 and Decree No. 2003-897 of 27 August 2003	The Law permits foreigners to purchase land in Madagascar (the alternative is to enter into a long-term lease).
Roads	Ministry of Transport, Tourism and Meteorology	Law No. 98-026 of 20 January 1999	The Law overhauls the Roads Charter.
Mining	Ministry of Mines and Strategic Resources	Law No. 99-022 of 19 August 1999	Mining Code
		Law 2001-031	Establishes a special regime for large investments in the mining sector.
		Decree No. 99-954 N2004-167	The Decree requires mining investment projects to be subject to an EIA, requires public participation as part of the process, and defines the requirements for an Environmental Licence.
		Decree No. 2000-170 of 18 November 2000	The Decree sets the conditions of application of the Mining Code.
		Inter-ministerial Order No. 12032-2000 of 6 November 2000	The Order sets out the regulation of the mining sector and matters relating to environmental protection.
		Decree No. 2003-784	The Decree requires mining permit holders to contribute to the costs of environmental impact studies for all large-scale mining projects (maximum of FMG682 million).
		Decree No. 2012-430	Provides for environmental and social protection in mining projects.
		Order No 19560 of 18 October 2004	Suspends the granting of mining permits in areas reserved for conservation.
Energy	Ministry of Energy, Water and Hydrocarbons	Decree No. 2003-942	The Decree regulates the use of water for the production of hydroelectricity.
Health	Ministry of Public Health	Law No. 2011-002 of 15 July 2011	The Health Code relates to all impacts on the environment which could affect the health and well-being of the population.
Gender	Ministry of Population, Social Protection and the Promotion of Women	Article 6 of the Constitution  National Gender and Development Action Plan	Calls for equal participation of women and men in public, economic and social life.
Employment and labour	Ministry of Labour, Employment, Public Service and Social Laws	Law No. 2003-044 of 28 July 2004	Contains the Labour Code

Sector	Primary agency	Title and date of document	Purpose
Risks and catastrophes	MESD	Law No. 2003-010 of 5 September 2003	Relates to national policy and management of risks and catastrophes

**Appendix 14-1****List of projects that must undertake an EIA**

- All developments, construction and works that could affect sensitive environments;
- All plans, programmes and policies that could modify the natural environment and use of natural resources and/or affect the quality of the human environment, whether urban or rural;
- The use or transfer of technologies that have the potential to cause damage to the environment;
- Storage of any liquid of more than 50 000 m<sup>3</sup>;
- All methods of commercial transport by road, rail or plane of dangerous goods (corrosive, toxic, contagious or radioactive);
- Any displacement of more than 500 people; and
- All developments, construction and works, which by their nature and size and the sensitivity of the receiving environment could result in environmental damage. These include:

**Infrastructure and development**

- All projects relating to the construction and maintenance of roads;
- All projects relating to the construction and maintenance of railways;
- All railway rehabilitation projects of more than 20 km in length;
- All projects relating to the construction, maintenance and rehabilitation of international, regional or national airports and/or with a runway length of more than 1500 m;
- All projects relating to the management, rehabilitation and maintenance (specifically dredging) of principal and secondary ports;
- All projects relating to the new construction of marine and freshwater ports;
- All projects involving the excavation or construction of embankments using more than 20 000 m<sup>3</sup>;
- All construction projects in development zones;
- All nuclear energy projects;
- All hydroelectric installations with a capacity of more than 150 MW;
- All thermal energy projects with a capacity of more than 50 MW;
- All power line construction projects of 138 kV or greater;
- All hydroelectric dams with a dam surface of more than 500 ha; and
- All projects for the establishment of navigable waterways, including dredging, of longer than 5 km.

**Agriculture and stock farming**

- All projects relating to the establishment or rehabilitation of irrigation agriculture or dry land agriculture of more than 1000 ha;

- Intensive stock-farming projects;
- Abstraction of surface or groundwater at a rate of more than 30 m<sup>3</sup>/h; and
- Application of chemical products, which by their scale of application could affect the environment and human health.

**Renewable natural resources**

- Introduction of new species of animals, plants or genetically modified organisms;
- Forestry operations greater than 500 ha;
- Collection and/or hunting and sale of species;
- Creation of terrestrial or marine parks and reserves at a national or regional scale;
- Introduction of native species of Madagascar into an area where they are not previously known; and
- All commercial sport hunting and fishing operations.

**Tourism and hotel industry**

- Establishment of hotels with a capacity of more than 120 bedrooms;
- Establishment of recreation and tourism developments with a combined surface area of more than 20 ha; and
- All restaurants with a seating capacity of more than 250 persons.

**Industrial sector**

- All industrial developments that require authorisation in terms of the regulations and requirements of Law No. 99-021 pertaining to the management policy for the control of industrial pollution;
- All industrial units that transform natural products e.g. tanneries and breweries; and
- Factories for the manufacture of animal feeds, with a capacity of more than 150 t/year.

**Management of diverse products and waste**

- All pesticide containers with a capacity of more than 10 tonnes;
- All domestic and industrial waste disposal sites, including those for hazardous materials;
- All units for the treatment and disposal of hospital wastes exceeding 50 kg/day;
- All containers for storage of radioactive products or wastes;
- Storage of dangerous or hazardous products; and
- Water treatment plants for domestic supplies.

**Mining sector**

- All exploitation or extraction of minerals by mechanical means;
- Mining of radioactive substances; and
- Physical and chemical processing plants at mine sites.

**Hydrocarbons and fossil fuels**

- All projects relating to the exploration for petroleum or natural gas using seismic and/or drilling methods;
- All projects relating to the extraction and/or transportation by pipeline of petroleum or natural gas;
- All projects relating to the extraction and industrial use of coal and coke;
- Petroleum and natural gas refineries with a capacity of more than 20 000 barrel-equivalents per day;
- All offshore structures;
- Extraction of bitumen at a rate of more than 500 m<sup>3</sup>/day; and
- All storage of petroleum products and derivatives, or natural gas, with a combined capacity of more than 25 000 m<sup>3</sup> or 25 million litres.

**Appendix 14-2****List of projects that must undertake a PREE****Infrastructure and development**

- All projects relating to the maintenance of tarred roads longer than 20 km;
- All projects relating to the maintenance of untarred roads longer than 30 km;
- All hydroelectric installations with a capacity of between 50 and 150 MW;
- All thermal energy projects with a capacity of between 25 and 50 MW;
- Sports fields with accommodation for more than 5000 spectators or events more than 3 hours in length; and
- All hydroelectric dams with a dam surface of between 200 and 500 ha;

**Agriculture and stock farming**

- All projects relating to the establishment or rehabilitation of irrigation agriculture or dry land agriculture of between 200 and 1000 ha; and
- Semi-industrial and small-scale stock-farming projects;

**Renewable natural resources**

- Forestry operations greater than 150 ha;
- Capture and sale of species for export;
- Creation of terrestrial or marine parks and reserves at a community and private scale;
- Reintroduction of native species of Madagascar into an area where they were previously known;
- Permanent utilisation or diversion of watercourses accounting for more than 50% of their mean annual flow;
- All permits for the collection and sale of species for export; and
- Augmentation of fishing stocks in the marine zone (a study of existing fish stocks would be required).

**Tourism and hotel industry**

- Establishment of hotels with a capacity of between 50 and 120 bedrooms;
- Establishment of recreation and tourism developments with a combined surface area of between 2 and 20 ha; and
- All restaurants with a seating capacity of between 60 and 250 persons.



**Industrial sector**

- All industrial developments that require authorisation in terms of the regulations and requirements of Law No. 99-021 pertaining to the management policy for the control of industrial pollution; and
- All small-scale units that transform or process natural products.

**Management of diverse products and waste**

- Storage of pharmaceutical products of more than 3 tonnes.

**Mining sector**

- All mineral prospecting projects;
- All exploitation or extraction of minerals by artisans;
- Mining of rare minerals;
- All artisanal gold panning operations mobilising more than 20 people in a radius of more than 500 m;
- Stockpiles with a combined capacity of more than 4000 m<sup>3</sup>;
- Underground storage of more than 100 m<sup>3</sup>; and
- Quarries for stone using mechanical methods.

## Acronyms

<b>CITES</b>	Convention on the International Trade in Endangered Species
<b>DGDD</b>	Directorate-General of Sustainable Development
<b>DGEF</b>	Directorate-General of Environment and Forests
<b>DIREDD</b>	Inter-Regional Directorates for the Environment and Sustainable Development
<b>DREDD</b>	Regional Directorates for the Environment and Sustainable Development
<b>EIA</b>	environmental impact assessment
<b>EMP</b>	environmental management plan
<b>FMG</b>	Malagasy Franc
<b>MECIE</b>	Mise en Compatibilité des Investissements avec l'Environnement (Ensuring the Environmental Suitability of Investments)
<b>MESD</b>	Ministry of Environment and Sustainable Development
<b>ONE</b>	Office National de l'Environnement (National Office for the Environment)
<b>PCB</b>	polychloro-biphenyls
<b>PREE</b>	Programme d'Engagement Environnemental (Programme of Environmental Engagement)
<b>REDD</b>	Reducing Emissions from Deforestation and Forest Degradation
<b>SDG</b>	Sustainable Development Goal
<b>SEA</b>	strategic environmental assessment
<b>TEC</b>	Technical Evaluation Committee
<b>UN</b>	United Nations

## Useful contacts

Department	Ministry	Telephone	Fax	Website
Office National de l'Environnement (ONE)	Ministry of Environment and Sustainable Development	+261-20-22-25999	+261-20-30693	<a href="http://www.pnae.mg">www.pnae.mg</a> <a href="mailto:one@pnae.mg">one@pnae.mg</a> <a href="http://www.medd.gov.mg">www.medd.gov.mg</a>