

ENVIRONMENTAL MANAGEMENT POLICY

Policy Number	PMID – P – AD – 3 rev 2
Version Number	2022 v1
Last review date	
Type of Policy	Strategic
Compiled by	PMID
Recommended by	Human Capital, Social and Ethics Committee
Approved by	TCTA Board
Signed obo the Board by	Gerald Dumas Board Chairperson Signature & Date: Digitally signed by Gerald Dumas Date: 2022.05.03 18:45:33 +02'00'
Effective Date	28 April 2022

TABLE OF CONTENTS

1.	ACRONYMS AND ABBREVIATIONS	
2.	DEFINITIONS	
3.	PURPOSE AND SCOPE 4	
4.	PROBLEM STATEMENT 4	
5.	PRINCIPLES	
6.	POLICY ON ENVIRONMENTAL MANAGEMENT	
7.	OBJECTIVES	
7.1	MANAGEMENT OBJECTIVES 7	
7.2	SOCIAL SUSTAINABILITY OBJECTIVES	
7.3	ENVIRONMENTAL SUSTAINABILITY OBJECTIVES	
8.	POLICY IMPLEMENTATION	
8.1	POLICY COMMUNICATION 11	
9.	ROLES, RESPONSIBILITIES AND ACCOUNTABILITY	
9.1	THE TCTA BOARD (ACCOUNTING AUTHORITY) 12	
9.2	EXECUTIVE COMMITTEE 12	
9.3	EXECUTIVE MANAGERS OF KEY STAKEHOLDER DIVISIONS	
9.4	HEAD OF ENVIRONMENT 13	
9.5	THE ENVIRONMENTAL MANAGER: ESMS13	
9.6	AUDIT, COMPLIANCE AND RISK	
9.7	POLICY COMMITTEE	
9.8	ESMS WORKING GROUP 13	
9.9	TCTA EMPLOYEES	
10.	POLICY MONITORING AND REVIEW 14	
11.	EFFECTIVE DATE	
ANNE	EXURE A: TCTA ENVIRONMENTAL MANAGEMENT SYSTEM STRUCTURE	
ANNEXURE B: ENVIRONMENTAL MANAGEMENT POLICY STATEMENT		

1. ACRONYMS AND ABBREVIATIONS

ESMS	Environmental and Social Management System
EWSS	Enterprise-Wide Support Services
EXCO	Executive Committee
ISO	International Organisation for Standardization
NEMA	National Environmental Management Act 107 of 1998
PMID	Project Management and Implementation Division
PSP	Professional Service Providers
ТСТА	Trans-Caledon Tunnel Authority

2. **DEFINITIONS**

TERM	MEANING	
Aspects:	The ways in which the activities interact with the receiving	
	environment(s), resulting in positive and / or negative changes.	
Impacts:	Changes that are the result of the way in which activities have been	
	undertaken in a receiving environment. Impacts of a single activity	
	can be both negative and positive in relation to different	
	components of the environment. Direct impacts are the result of an	
	immediate activity but the knock-on effect of an activity results in	
	secondary impacts / changes.	
Sustainability:	a concept that is composed of three pillars: economic,	
	environmental and social also known as prosperity, planet and	
	people, that focuses on meeting the needs of the present	
	generation without compromising the ability of future generations to	
	meet their needs.	
Continual	actively identifying and making changes that result in better	
improvement:	outcomes.	
Environment	The surroundings within which humans exist and made up of:	
As defined in the	(i) the land, water and atmosphere of the earth;	
National	(ii) micro-organisms, plant and animal life;	
Environmental	(iii) any part or combination of (i) and (ii) and the inter-	
Management	relationships among and between them; and	
Act 107 of	(iv) the physical, chemical, aesthetic and cultural properties	
1998),	and conditions of the foregoing that influence human	
	health and well-being.	
Environmental	Elements of the management system that are used to manage	
and Social	environmental and social aspects, fulfill compliance obligations,	
Management	and address risks and opportunities.	
System		
Environmental	The practice of managing the interactions and impact of human	
Management:	activities on the natural environment, and vica versa.	
Risks and	Potential adverse effects (threats) and potential beneficial effects	
opportunities	(opportunities).	

3. PURPOSE AND SCOPE

This Trans-Caledon Tunnel Authority (TCTA) Environmental Management Policy ('the Policy') presents the organisation's values and approaches with respect to environmental sustainability and governance of associated risk. The Policy outlines TCTA's environmental and social management objectives that are aligned with the King IV Corporate Governance Standard, Sustainable Development Goals and international good practice standards.

In line with the National Environmental Management Act 107 of 1998 (NEMA), TCTA views the environment to be: *a*) the natural environment, consisting of biotic and abiotic structures and resources, that are consumed, transformed, polluted and disposed of and *b*) the social environment, which encompasses directly and indirectly impacted individuals and their communities or their social structures and livelihoods.

The achievement of TCTA's deliverables and the continued health and well-being of the social and natural environment are interdependent. The Policy applies to all aspects of the organisation's operations, including those required for the successful implementation and operation of infrastructure projects as directed by the Minister of Water and Sanitation. Accordingly, this Policy provides a systematic approach to continual improvement, based on the International Standards Organisation (ISO) 14001:2015 Environmental Management Standard.

4. **PROBLEM STATEMENT**

Environmental risks and uncertainties influence TCTA's ability to support the Department of Water and Sanitation in pursuit of a sustainable water supply through ensuring the timeous development of infrastructure for the expanded supply of water to address historical imbalances relating to access to water whilst stimulating South Africa's economic growth. The integration of environmental and social sustainability into the TCTA core values, operating principles and business strategies is identified as critical to the realisation of the organisation's goals and strategic objectives.

TCTA is committed to growth through capitalising on the organisation's experience and expertise gained during the successful funding, implementation operation and maintenance of government bulk raw waterworks to date. To this end, TCTA continues to formalise and improve its approach to the integrated management of its operations through the expansion of an organisation-wide Environmental and Social Management System (ESMS).

The approach to integrated environmental management reduces risks in line with the organisation's risk appetite and responds to an increasing focus on the need to assure practice and performance whilst accounting for potentially negative consequences of doing business. TCTA is required to provide assurance of responsible practice, within legal requirements, in a range of receiving environments and with due regard to a diversity of impacted and affected project stakeholders. Should there be a misalignment between legal obligations, Lender requirements or international standards, the legal obligations take precedence.

5. PRINCIPLES

The Environmental Management Policy reflects principles of sustainability, integrated environmental management and is aligned with the King IV code of corporate governance. TCTA's environmental approach and management system are founded on the following specific principles:

- **Recognition of the interdependency** of society, the economy and the environment.
- **Responsible corporate citizenship**, embracing TCTA's rights and responsibilities towards the natural and social environment and to be seen as such by stakeholders.
- Ethical, competent and legitimate practice in environmental and social management.
- **Appreciation of TCTA's** core purpose, risks, opportunities, strategy, business model, performance and sustainable development contributions as inseparable elements of the organisation's value creation process.
- **Recognition of the value creation potential** of interdisciplinary collaboration in limiting risk and improving resource utility.
- Stakeholder inclusivity in risk and impact management.
- **Assurance** of environmental and social management to enable an effective control environment.

- Meaningful performance evaluation enabling improvement in the application of the mitigation hierarchy and management system components and decision-making.
- **Transparent and meaningful reporting** that provides a fair representation of performance and progress in an integrated manner.

6. POLICY ON ENVIRONMENTAL MANAGEMENT

TCTA is committed to upholding the constitutional right to an environment that is not harmful to health or well-being and is protected for the benefit of present and future generations. In pursuit of this commitment, TCTA acknowledges that all elements of its operations result in impacts, of varying significance, on the receiving environments and their inhabitants.

TCTA operations are planned and implemented with direct consideration of environmental sensitivity in a socially responsible manner and prioritise the avoidance and limitation of negative impacts on the natural and social environment. TCTA further promotes operations that support the achievement of positive outcomes for the receiving communities, ecosystems, the water sector and the organisation.

TCTA pursues continual improvement by ensuring that:

- The approach to environmental management identifies, limits and, where necessary, mitigates risk whilst promoting transparency, ethical practice and learning from experience.
- Environmental requirements and opportunities are integrated into a multidisciplinary management approach which includes TCTA's funding and construction and operational risk management.
- ESMS frameworks are developed, implemented and maintained to drive excellence and continual improvement in environmental performance through the alignment of related internal policy and through improved consciousness, conduct, strategies and processes.
- Operational processes are implemented to identify, avoid, control, limit and mitigate negative impacts on the environment and its inhabitants.
- The prevention of significant pollution impacts the swift remediation of unavoidable incidents.

- The prudent and responsible use of water, energy and other resources is promoted.
- Operations are planned and implemented to promote appropriate opportunities for achieving positive impacts.
- Full compliance with legal and other requirements is maintained and assured.
- Project partners are regularly provided with accurate and relevant information on the performance, progress, risks and impacts associated with each of the active infrastructure projects.
- Stakeholder engagement is effective and recognises the 'right to know' of especially affected but also interested communities.
- Communication is constructively planned to be timely, transparent, accurate and aligned with the needs of the receiving communities and those of the organisation.
- Employees are educated, trained and motivated about environmental management and its role in achieving sustainability.
- TCTA service providers, including Professional Service Providers (PSPs), Contractors and Plant Operators are contractually obligated to uphold the TCTA Policy and Environmental Standards as relevant to their delivered services.

7. OBJECTIVES

To give effect to the above policy statement, TCTA seeks to achieve the following environmental and social objectives.

7.1 MANAGEMENT OBJECTIVES

Responsible Corporate Citizenship:

TCTA exercises sound corporate citizenship through ethically driven compliance and good practice and embraces its rights and responsibilities towards society and the environment. In so doing, TCTA strategic objectives, as agreed between TCTA and the department of Water and Sanitation, are aligned with the government's sustainable development programmes. TCTA operates with due regard to legal, regulatory and other relevant requirements and standards to which TCTA management is committed.

Integrated Environmental Management:

In recognition of the potential of environmental and social services to limit risk, TCTA applies an integrated and collaborative approach to the identification, management

and control of the organisation's operations and activities that may be to the detriment of the environment, stakeholders and the economy. This value is reflected in the overall performance of projects and the organisation in terms of its strategic, corporate and business planning.

7.2 SOCIAL SUSTAINABILITY OBJECTIVES

Social Responsibility:

Ethical values are applied in identifying what is good and right for TCTA, its stakeholders and society. These values are reflected in the decisions, conduct and relationships of TCTA and its representatives. In so doing, TCTA maintains a social license to operate that enables effective consultation, meaningful impact reduction and supports the implementation of Community Development Projects that achieve positive legacy outcomes.

Livelihoods and Resettlement:

TCTA respects the value of social stability, productivity and livelihoods to the individuals and communities affected by the organisation's operations and projects. Balancing the needs, expectations, interests of society, the organisation's material stakeholders and itself, TCTA in its acquisition of land and land rights required for project implementation, seeks to avoid and, where unavoidable, minimise relocation and livelihood impacts, seeking opportunities to maintain or better the livelihoods of impacted parties.

Transformation:

Transformation is achieved through training, internships and enterprise development programmes, preferential procurement practices and the creation of employment opportunities. This is in line with the government's transformation agenda and contributes towards the realisation of the Sustainable Development Goals, specifically for the promotion of gender equality, creation of decent work and sustained economic growth.

7.3 ENVIRONMENTAL SUSTAINABILITY OBJECTIVES

Resource Management:

TCTA recognises the diversity of resources under its direct or indirect control. In managing **resource use**, the consumption of **key/ indicator resources** is monitored and managed towards improved utility and reduced waste.

Resource transformation impact acknowledgement, avoidance and mitigation:

It is prioritised to limit the long-term negative impacts on land, land use potential, water bodies and the social and ecological systems which they support. This is achieved through interdisciplinary collaboration, responsible management of development footprints, limitation of the intensity and duration of the disturbance and the implementation of fit for purpose rehabilitation.

Waste:

Implementation of responsible waste management that promotes the prevention, reduction, reuse and recycling of waste whilst assuring the responsible disposal of remaining waste at fit for purpose disposal facilities in line with legislated requirements.

Pollution Management and Prevention:

TCTA seeks to understand and reduce its contributions to pollution through the monitoring and reduction of emissions and the prevention of pollution risks and impacts. Where pollution cannot be prevented, risks and impacts are controlled to ensure no material adverse impacts on the receiving environment (soil, water or air) and its function.

8. POLICY IMPLEMENTATION

TCTA's objectives, as expressed above, are achieved through the systematic implementation of a TCTA-wide ESMS (**Annexure A**) that is based on a framework provided by the ISO 14001: 2015 Environmental Management Standard. TCTA environmental practices and processes are to be implemented, monitored, measured and reported on to achieve the objectives expressed in section 5 above. Areas for improvement are identified, investigated and addressed to enable the limitation of risk and constraints that hinder learning, growth and improvement.

The TCTA ESMS comprises two separate spheres, based on the nature of TCTA operations as outlined in the Environmental Strategy. The Corporate ESMS incorporates the elements of environmental and social sustainability related directly to the activities of the TCTA corporate office.

The Projects ESMS encompasses those elements of the business that are specifically related to the funding, implementation and operation of infrastructure development projects, often managed and controlled through a PSP or appointed operator.

The two spheres of the ESMS jointly contribute to the overall achievement of the TCTA goals and the social and environmental objectives, as illustrated in **Annexure A**.

The TCTA ESMS is designed to provide an assurance function that is founded on the establishment and maintenance of fact-based information systems. It is structured to integrate with and support existing organisational systems and processes.

- A multidisciplinary ESMS Working Group will oversee and monitor the ESMS operations, recommending measures to establish and maintain high levels of performance and continual improvement.
- Operational control will be facilitated through the establishment and application of TCTA environmental and social standards that will be reflected in the performance contracts of key personnel and the contractual obligations of relevant service providers appointed to represent TCTA. These include but are not limited to the PSPs, Construction Contractors and Plant Operators.
- Meaningful and measurable indicators of performance are identified for significant aspects and are monitored and evaluated, using strategically selected simple metrics.
- Compliance, progress and performance are monitored, evaluated and reported on in relation to TCTA's legal and regulatory obligations, lender obligations, other organisational commitments and internal operational controls.
- The monitoring of clear, measurable metrics and evaluation of progress and performance will take the form of practice reviews, inspections, investigations and internal audits.
- Results assure the suitability of control and mitigation measures and enable informed decision making for continual improvement.
- The learning-focused monitoring of change over time identifies patterns and trends that support the identification of areas for improvement in performance.
- Where applicable **corrective actions** and improvement measures will be implemented, assessed and reported on.

- **Quality control mechanisms** will be applied as required to ensure good practice and growth. These mechanisms will include, amongst others, the use of independent Environmental Control Officers, internal and external auditors and the use of an environmental Panel of Experts.
- **Project and programme specific environmental and social records are maintained to show** progress and performance against specific targets and to inform a consolidated overview of TCTA environmental and social performance.
- A TCTA Environmental and Social Performance Report is to form a basis for the annual ESMS Management Review as undertaken by Executive Committee (EXCO) (Annexure A).

The results of the ESMS Management Review are presented to the relevant Board Committees and the Board.

The **outcome of the management review will be applied to improve** both practice and the management system, ensuring that it remains adequate, suitable and effective.

8.1 POLICY COMMUNICATION

The Policy is disseminated as follows to ensure its effective communication and implementation:

- The approved and signed Policy will be available via SharePoint and the TCTA website, making it available to all employees, funders and external parties. It will be made available to all interested and affected parties on request;
- The formal sharing of the policy revision with all employees of TCTA as part of the ESMS Awareness Programme;
- TCTA's service providers will be briefed on this Policy as relevant to the scope of their services and conditions of appointment to facilitate the intention of building mutual understanding of the environmental and social expectations and accountabilities.

The TCTA Policy Statement, presented in Annexure B, is the approved summary version of this Policy. It enables effective communication of the key elements of this Policy for the purpose of internal and external communications or publications.

9. ROLES, RESPONSIBILITIES AND ACCOUNTABILITY

9.1 THE TCTA BOARD (ACCOUNTING AUTHORITY)

The TCTA Board is responsible for the establishment of an ESMS for the management of all direct and indirect environmental impacts associated with TCTA projects and activities. This is in line with the requirements of King IV. The Board will approve the structure and function of the ESMS, and together with the Human Capital Social and Ethics Committee will provide oversight and will demonstrate support for the implementation thereof. The Annual Management Review outcomes and recommendations to the Board will be considered and adopted as deemed appropriate.

9.2 EXECUTIVE COMMITTEE

EXCO monitors the implementation of this policy and shall conduct an annual management review to identify and make recommendations on areas for improvement. EXCO shall include environmental commitments and adapt the environmental strategy to determine the efficacy and to make recommendations for improvement, including the setting of additional and revision of existing organisational objectives, indicators and targets.

9.3 EXECUTIVE MANAGERS OF KEY STAKEHOLDER DIVISIONS

The Executive Manager Project Management and Implementation Division (PMID) is responsible for the overall co-ordination of ESMS implementation as the Environmental Team is located within PMID.

Executive Management of PMID, Project Finance, Enterprise-Wide Support Services (EWSS) and the Strategy Division, within their respective divisional functions and jurisdictions, are responsible for the development, implementation, administration and review of the relevant facets of the ESMS.

- The Executive Managers of PMID and Project Finance are responsible for the Projects' sphere of the ESMS.
- The EWSS Executive Manager is responsible for the relevant elements of the corporate sphere of the ESMS related to the operation and maintenance of the office facility and associated services.

- The Chief Strategy Officer ensures that matters of environmental and social sustainability, communication and stakeholder engagement are incorporated into TCTA strategic planning in support of the implementation of the ESMS.
- The CFO promotes responsible procurement that contributes to the realisation of TCTA's social and environmental objectives in alignment wit the organisation's commitment to socio-economic transformation and continual improvement towards sustainable development.

9.4 HEAD OF ENVIRONMENT

The TCTA Head of Environment is to ensure the development, implementation and maintenance of the ESMS.

9.5 THE ENVIRONMENTAL MANAGER: ESMS

Is responsible for conceptualisation and development of the TCTA-wide ESMS, the implementation, support and monitoring thereof and for exercising environmental quality assurance and management reporting.

9.6 AUDIT, COMPLIANCE AND RISK

Compliance to this policy is monitored and audited in alignment with the Combined Assurance Charter.

9.7 POLICY COMMITTEE

The policy committee is to consider the content and impact of this policy on other organisational policies.

9.8 ESMS WORKING GROUP

The ESMS Working Group will oversee and monitor the ESMS operations, recommending measures to establish and maintain high levels of performance and continual improvement.

9.9 TCTA EMPLOYEES

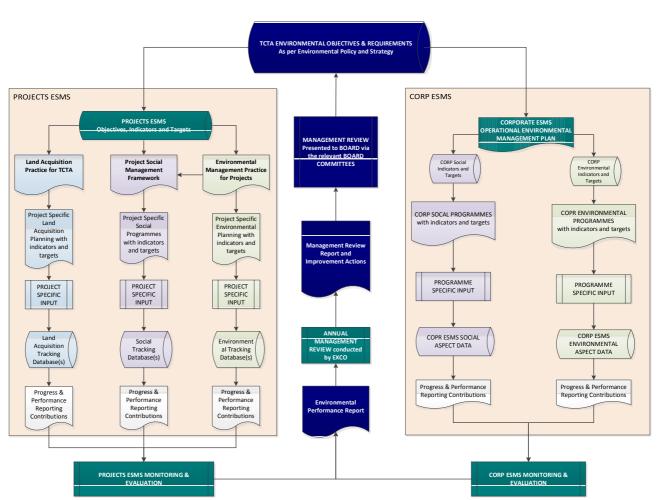
The National Environmental Management Act (Act 107 of 1998) states that all persons have a 'Duty of Care'. As such, each TCTA Employee is responsible for upholding commitments and principles made in this Policy and for working towards the realisation of the TCTA environmental objectives.

10. POLICY MONITORING AND REVIEW

This Policy will be evaluated in the annual ESMS management review process to ensure that it remains in line with the organisational goals, growth aspirations, commitments and needs. Interim revisions of this Policy will be done if the annual Management Review identifies the need for this. A comprehensive policy revision will be conducted at least every three (3) years. Revisions will assure that the needs and interests of the organisation, its leadership, key TCTA Stakeholders and other interested and affected parties are accounted for.

11. EFFECTIVE DATE

The Policy will become effective on the date of approval.



ANNEXURE A: TCTA ENVIRONMENTAL MANAGEMENT SYSTEM STRUCTURE

ANNEXURE B: ENVIRONMENTAL MANAGEMENT POLICY STATEMENT

TCTA, as a responsible corporate citizen, upholds the constitutional right to an environment that is not harmful to health or well-being and is protected for the benefit of present and future generations.

TCTA operations are planned and implemented with direct consideration of environmental sensitivity, in a socially responsible manner and prioritise the avoidance and limitation of negative impacts on the biophysical and social environment.

TCTA promotes operations that support the achievement of positive outcomes for the receiving communities, ecosystems, the water sector and the organisation. Environmental objectives at the centre of these efforts include:

- Demonstration of responsible corporate citizenship through improved sustainability and compliance with legal and other requirements.
- Application of an integrated approach to managing the organisation's operations, activities and impacts on resources, biodiversity, health and safety of employees, stakeholders and wider communities.
- Maintenance of a social license to operate and the achievement of positive legacy outcomes, particularly for individuals and communities impacted by TCTA projects.
- Meeting of socio-economic targets in line with the government's transformation agenda.
- Investigation of opportunities for improved resource use and transformation whilst exercising effective waste management and pollution prevention.

TCTA is committed to the continual improvement of an integrated, organisation-wide ESMS that supports the realisation of the organisation's full suite of environmental and social objectives as detailed in the comprehensive Environmental Management Policy, available on www.TCTA.co.za.

TCTA, its employees and service providers are required to practice responsible environmental and social management in an ethical, competent and legitimate manner and in line with the 'Duty of Care Principle' expressed in the National Environmental Management Act 107 of 1998.