

# **STANDARD OPERATING PROCEDURE**

## **CONSTRUCTION ENVIRONMENTAL MANAGEMENT**



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Standard Operating Procedure -  
Construction Environmental Management  
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## DOCUMENTATION SIGN-OFF SHEET

I, the undersigned hereby approve this procedure.

ROLE	CAPACITY/ FUNCTION	SIGNATURE	DATE
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## Table of Contents

1. PURPOSE .....	6
2. APPLICABILITY .....	6
3. REFERENCE DOCUMENTS .....	7
4. DEFINITIONS AND ABBREVIATIONS .....	9
4.1 DEFINITIONS.....	9
4.2 ABBREVIATIONS .....	12
5. ACCOUNTABILITY, RESPONSIBILITY AND AUTHORITY .....	14
5.1 Transnet Procurement Department .....	14
5.2 Transnet Project Manager (PM).....	14
5.3 Transnet Project Environmental Resource .....	14
5.4 Transnet Construction Manager (CM).....	16
5.6 Environmental Control Officer .....	17
5.7 Contractor's Environmental Officer .....	17
5.8 The Contractor .....	20
5.9 Reporting Lines .....	20
6. STANDARD OPERATING PROCEDURE .....	21
6.1 Tender Stage (prior to Contract Award) .....	21
6.2 Construction Stage (prior to Site Access).....	22
6.3 Construction Stage (post Site Access).....	23
6.4 Post Construction.....	26
7. RECORDS .....	26
8. ANNEXURES.....	29
8.1 List of Construction Environmental Management Templates, Forms .....	29
and Guidelines .....	29
8.2 009-TCC-CLO-SUS-TMP-11386.22 - Construction Environmental Management File Index ..	29
Annexure 8.1 List of Construction Environmental Management Templates, Forms and	
Guidelines .....	30
Annexure 8.2 Construction Environmental Management File Index .....	32

Annexure 8.3 Construction Environmental Management Process Flow .....35

## **1. PURPOSE**

**1.1** The purpose of this Standard Operating Procedure (SOP) is to define how environmental management will be practiced on any construction project under the management of Transnet to ensure that the environment is considered, negative impacts avoided or minimized, and positive impacts are optimized and/or enhanced throughout the lifecycle of the asset.

**1.2** It further defines environmental management responsibilities for key stakeholders involved in the construction management process.

**1.3** It must be read in conjunction with the Contractor Environmental and Sustainability Specification Guidelines (CESSG) and the Project Environmental Specification (PES) relevant to the project.

**1.4** In this document, unless the context clearly indicates otherwise:

- Words importing any one gender shall include the other gender.
- The singular shall include the plural and vice versa; and
- Any reference in this document to legislation or subordinate legislation is to such legislation or subordinate legislation at the date of promulgation thereof and as amended and/or re-enacted from time to time.

## **2. APPLICABILITY**

**2.1** The SOP applies to any construction project under the management of Transnet SOC Ltd or its Construction Agent.

### 3. REFERENCE DOCUMENTS

Name	Applicable Section
<b>Constitution of South Africa, Act 108 of 1996</b>	Section 24 (a) right to an environment that is not harmful to health or wellbeing Section 24(b) (i) right to have environment protected for current and future generations through legislation and measures that prevents pollution and ecological degradation.
<b>Capital Governance and Assurance Policy</b>	Entire document
<b>Capital Governance and Assurance Framework</b>	Entire document
<b>Capital governance and Assurance Manual</b>	Entire document.
<b>PLP Manual – Execution</b>	Entire document
<b>National Environmental Management Act, 107 of 1998</b>	Section 2 National Environmental Management Principles (4) (viii), (e), (h), (j) and (p).
<b>National Water Act, 36 of 1998</b>	Section 164, Permissible Water Use Section 19
<b>National Environmental Management: Waste Act, 58 of 2008</b>	Part 1 15 (1) (i) and (2) Part 6 26 (10) (a) and (b) Scheduled 3, Defined Wastes Category B: Hazardous Wastes Part 8: Contaminated Land
<b>Environment Conservation Act, 73 of 1989</b>	Section 20
<b>Occupational Health and Safety Act, 85 of 1993</b>	Asbestos Regulations, 2001 Government Notice R155 in Government Gazette 23108 of February 2002

Name	Applicable Section
	General Safety Regulations-Reg. 2 (2) PPE
<b>GNR 326, 7 April 2017 as amended, EIA Regulations</b>	Chapter 15
<b>Integrated Management System – Policy Statement Procedure (TRN-IMS-GRP-PROC-002)</b>	Whole document
<b>Integrated Management System – Competency, Awareness and Training Procedure</b>	Whole document
<b>Integrated Management System<sup>1</sup> – Document, Data and Record Management Procedure (TRN-IMS-GRP-PROC-010)</b>	Whole document
<b>Integrated Management System – Occurrence and Non-Conformance Management Procedure (TRN-IMS-GRP-PROC-013)</b>	Whole document
<b>Transnet Environmental Risk Management Strategy and Framework</b>	2015:42
<b>Environmental Management Systems ISO 14001: 2015</b>	Clause 5, 6, 7, 8, 9 and 10

<sup>1</sup> Management of certain documents, data and records will be in accordance with NEC3 – Engineering and Construction Contract prescripts

009-TCC-CLO-SUS-11386

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## 4. DEFINITIONS AND ABBREVIATIONS

### 4.1 DEFINITIONS

<b>Compliance</b>	The action or fact of complying with legislation or regulations.
<b>Conformance</b>	The action or fact of conforming to this standard and other internal Transnet policies, procedures, guidelines and best practice.
<b>Contractor</b>	The <b>Principal Contractor</b> as engaged by Transnet for infrastructure construction operations, including all sub-contractors appointed by the main contractor of his own volition for the execution of parts of the construction operations; and any other contractor from time to time engaged by Transnet directly in connection with any part of the construction operations which is not a nominated sub-contractor to the Principal Contractor.
<b>Contractor Environmental and Sustainability Specification Guidelines (CESSG)</b>	A set of minimum environmental standards for all Transnet SOC Ltd-managed construction sites.
<b>Corrective Action</b>	It is generally a reactive process used to address problems after they have occurred. Corrective action may be triggered by a variety of events, e.g. Non-conformance to documented procedures and work instructions, non-conformances raised through internal audits, unacceptable monitoring and measurement results, internal & external SHEQ complaints, etc.
<b>Emergency</b>	Sudden unforeseen event needing immediate or prompt action.

<b>Environment</b>	Surroundings in which the Contractor operates, including air, water, land, natural resources, flora, fauna, humans and their interrelations.
<b>Environmental Aspect</b>	Element of an organization's activities or products or services that interacts or can interact with the environment
<b>Environmental Authorisation (EA)</b>	Environmental Authorisation is the authorisation granted by a competent authority of a listed activity or specified activity in terms of National Environmental Management Act 107 of 1998 (as amended).
<b>Environmental Impact</b>	Change to the environment whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects
<b>Environmental Management Plan (EMP)</b>	A plan generated by the Contractor describing the relevant roles and responsibilities and how potential environmental risks will be assessed and managed including the monitoring and recording thereof.
<b>Environmental Management Programme (EMPr)</b>	A programme that has been approved by the Competent Authority in terms of NEMA, 107 of 1998 stipulating information on any proposed management, mitigation, protection or remedial measures that will be undertaken to address the environmental impacts that have been identified
<b>Environmental Risk</b>	The product of the likelihood and severity of an unforeseen occurrence/incident/aspect and the impact it would have, if realised, on the environment



<b>Incident/Occurrence</b>	An undesired event occurring at work that results in physical harm to a person or death, or damage to the environment, plant and/or equipment, and/or loss of production.
<b>Non-conformance</b>	An action or situation that does not conform to Transnet's SHEQ standards, procedures or legislative requirement(s) and that can be, or lead to, an unacceptable SHEQ incident.
<b>Non-compliance</b>	Contravention to environmental legislative requirements.
<b>Project Environmental Specification (PES)</b>	Describes standards specific to a particular project. Variations and additions to the MESC are set out in this PES. These would include the EA issued to the project or elements generally drawn from the EA or permits for that project or from specific requirements set by the Transnet Operating Divisions. The PES may also require a more stringent standard to that described in the MESC if required by the EA or a particular industry code to which Transnet subscribes including any environmental constraints at a construction site.
<b>Sub -Contractor</b>	<p>A person or organisation who has a contract with the contractor to</p> <ul style="list-style-type: none"> <li>- Construct or install part of the contractors work.</li> <li>- Provide a service necessary to provide the works; or</li> <li>- Supply plant and materials which the person or organisation has wholly or partly designed specifically for the works.</li> </ul>

## 4.2 ABBREVIATIONS

Acronym	Meaning in Full
<b>CESSG</b>	Contractor Environmental and Sustainability Specification Guidelines
<b>CM</b>	Construction Manager
<b>CV</b>	Curriculum Vitae
<b>CEM</b>	Construction Environmental Management
<b>DFFE</b>	Department of Forestry, Fisheries and the Environment
<b>DWS</b>	Department of Water and Sanitation
<b>EA</b>	Environmental Authorisation
<b>ECO</b>	Environmental Control Officer
<b>EO</b>	Environmental Officer
<b>EMI</b>	Environmental Management Inspectorate
<b>NCR</b>	Non-conformance Report
<b>NEMA</b>	National Environmental Management Act 107 of 1998 (as amended)
<b>PER</b>	Project Environmental Resource
<b>PES</b>	Project Environmental Specification
<b>PLP</b>	Project Life-cycle Process
<b>PM</b>	Project Manager

Acronym	Meaning in Full
<b>SAHRA</b>	South African Heritage Resources Agency
<b>SOP</b>	Standard Operating Procedure
<b>SHEQ</b>	Safety, Health, Environment and Quality
<b>Transnet</b>	Transnet SOC Ltd

## **5. ACCOUNTABILITY, RESPONSIBILITY AND AUTHORITY**

### **5.1 Transnet Procurement Department**

- 5.1.1 Ensures that this SOP (and relevant associated environmental specifications) is included in any construction-related request whether open market, quotation or confinement process.
- 5.1.2 The Procurement Department shall further ensure that the relevant environmental personnel are consulted during tender review, tender evaluation and contract award.

### **5.2 Transnet Project Manager (PM)**

- 5.2.1 Takes overall accountability for the project including ensuring that this SOP is implemented by all relevant stakeholders.
- 5.2.2 The specific tasks during construction will include:
  - Appointment of the Transnet Environmental Resource/s;
  - Certifying site access to the Contractor;
  - Giving instructions to the Contractor on recommendation from the Transnet Environmental Resource/s (e.g. defects, non-conformances etc.); and
  - Certifying site closure to the Contractor.

### **5.3 Transnet Project Environmental Resource**

- 5.3.1 The Transnet Project Environmental Resource (PER) will be responsible for ensuring that this SOP and associated specifications or requirements are complied with. The Transnet PER will report functionally to the relevant PM.
- 5.3.2 The specific tasks will include:
  - Preparation of the PES;
  - Tender evaluation, development of environmental criteria and adjudication thereof;
  - Liaison with the relevant environmental Competent Authorities;

- Review and approve site layout plan including any subsequent revisions thereof;
- Environmental Induction of Contractor's staff;
- Generate an inspection checklist prior to construction commencement;
- Review and Sign off Method Statements prepared by Contractor;
- Prepare environmental monitoring protocols/checklists to be used during construction;
- Prepare monthly conformance audit reports, including sign-off on Monthly Inspection Reports;
- Conduct monthly observation & inspections of all work places based on the approved inspection checklist;
- Audit conformance to Method Statements;
- Monitor the Contractor's compliance with this SOP and any other environmental requirements relevant to the site;
- Develop an Audit Finding and Close out Register that documents all audit findings, close out actions and the time frame allowed for in order to close the finding/s;
- Ensure that all environmental monitoring programmes (sampling, measuring, recording etc. when specified) are carried out according to protocols and schedules;
- Measurement of completed work (e.g. areas top soiled, re-vegetated, stabilised etc.);
- Attendance at scheduled SHE meetings, as and when required, and project coordination meetings;
- Ensure that site documentation (permits, licenses, EA, EMP, SOP-CEM, method statements, audit reports, waste disposal slips etc.) related to environmental management is maintained on the relevant Document Control System;
- Inspect and report on environmental incidents and check corrective action;
- Keep a photographic record of all environmental incidents;

- Environmental incident management as required by Transnet policies and procedures;
- Implementation of environmental-related actions arising out of the minutes from scheduled meetings;
- Management of complaints register;
- Conduct any environmental incident investigations;
- Coordinate and/or facilitate any environmental monitoring programmes e.g. EMI Inspections, ECO Audits, Transnet Environmental Assurance Audits etc.
- Collate information received, including monitoring results into a monthly report that is supported with photographic records to the Transnet CM and Transnet PM showing progress against targets; and
- Report environmental performance of the project on a monthly basis through relevant governance channels.

5.3.3 The tasks stipulated above may be conducted by one or more Project Environmental Resource, depending on the scale, complexity and sensitivity of the environment. Discretion to be taken by the Environment Lead within the area of control of the project site.

#### **5.4 Transnet Construction Manager (CM)**

5.4.1 The Transnet Construction Manager (CM) has overall responsibility for environmental management on site and reports to the Transnet PM. The Transnet CM is supported by the Transnet PER.

5.4.2 The specific tasks during the construction stage will include:

- Reviewing the monthly reports compiled by the Transnet PER;
- Approving method statements prepared by the Contractor;
- Communicating directly with the Contractor on environmental issues observed on-site; and
- Escalating any relevant environmental matters to the Transnet PM.



## **5.6 Environmental Control Officer**

5.6.1 The Environmental Control Officer is an independent person legally appointed to monitor compliance of construction related activities with the conditions of the Environmental Authorisation. The ECO fulfils an autonomous role and submits reports to the Competent Authority at timeframes specified in the Environmental Authorisation.

5.6.2 The Environmental Control Officer will conduct the following tasks:

- Monitors compliance to the conditions of the EA, Environmental Management Programme (EMPr) and can include permits and licences applicable to a project;
- Attends project meetings as and when required;
- Conducts audits at a frequency stipulated on the EA/EMPr; and
- Compiles audit reports and submits them to relevant authorities.

## **5.7 Contractor's Environmental Officer**

5.7.1 The Contractor's Environmental Officer (EO) must ensure implementation of the requirements of this SOP on site.

5.7.2 The Contractor's EO will liaise with the Transnet PER on site. It will be the responsibility of the Contractor's EO to ensure that all work is conducted according to the approved Method Statements and that the Contractor team's roles and responsibilities as set out in this document are fulfilled.

5.7.3 The Contractor EO's tasks will include:

- Developing an appropriate environmental file for approval by the Transnet PER prior to site access, including but not necessarily limited to (the environmental file must always be available and up to date on the construction site):
  - All environmental documents provided by Transnet in the tender e.g. policies, SOPs, standards, environmental approvals;

- Contractors commitments to comply with this SOP and associated documents as signed during tender;
- The Contractor's EMP;
- His/her CV;
- An organogram indicating reporting lines of all Contractor's staff (with names included);
- Contact Information for: the overall responsible person acting on behalf of the Contractor to execute the construction works; Contractor's CM; Contractor's EO; all relevant emergency personnel;
- A list of the Contractor's plant and equipment indicating a description of the plant/equipment, its fuel capacity, any hazardous components (oils, greases etc.), individual service/maintenance cycles and noise levels;
- A list of hazardous substances to be used during construction indicating: official substance name from Material Safety Data Sheet (MSDS); quantity on site; storage method; transport method to site; period to be used on site (all substances listed must have an MSDS on site in the environmental file);
- Site Layout Plan indicating but not necessarily limited to, access roads, site offices, material laydown areas, stockpile areas and parking areas, waste and effluent storage and handling facilities, entire construction footprint, no-go-areas, sewage and sanitary facilities. The plan must be appropriately drawn on a computer and must be clearly visible and properly scaled;
- A site establishment method statement (for more details on what method statements should entail the Contractor must refer to the Minimum Requirements for Construction Environmental Management)
- Conducting an activity-based environmental risk assessment based on the Contractor's scope of work;
- Agreeing on an appropriate inspection schedule with the Transnet PER (either daily or weekly);



- Ensuring that all required Contractor staff attends the environmental induction to be given by the Transnet PER (any Contractor's staff, sub-contractors or visitors to site must subsequently be inducted by the Contractor's EO);
- Inspection of the work area(s) as per schedule or authorised through written instruction by Transnet PER;
- Preparing activity-based Method Statements that indicate how environmental risks will be managed on site OR ensuring that the necessary environmental information is included in the Contractor's method statements (all method statements must be maintained in the Contractor's Environmental File);
- Identify local, provincial and national environmental legislation that applies to the Contractor's activities;
- Conduct ongoing Environmental Awareness Training of the Contractor's site personnel;
- Reporting, investigating and recording of any environmental incidents caused by the Contractor or due to the Contractor's activities, including their sub-contractors and visitors;
- Close out of environmental incidents;
- Attendance at all SHE meetings and induction programmes, and toolbox talks where required
- Monitor Waste Management;
- Monitor Water Management;
- Monitor Energy Management;
- Ensure that environmental signage and barriers are correctly placed;
- Taking required corrective action within specified time frame and close out of non-conformances; and
- Maintain site documentation related to environmental management on site.

5.7.4 The Contractor's EO will be expected to submit reports to the Transnet PER on a daily/weekly basis.

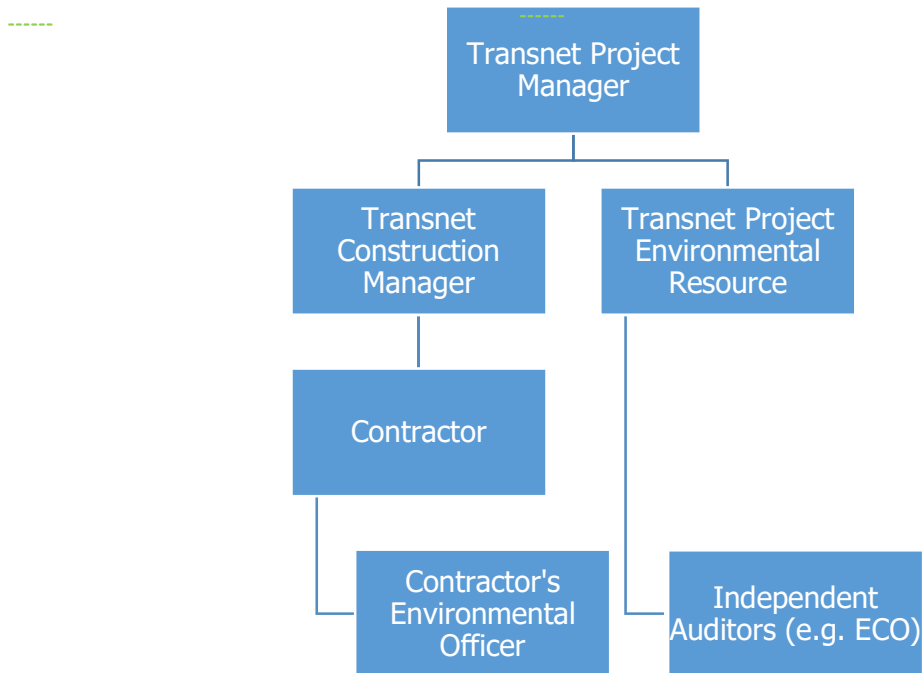
## **5.8 The Contractor**

- 5.8.1 The Contractor shall comply with the requirements of this SOP and abide by the Transnet PM's instructions regarding the implementation of this SOP.
- 5.8.2 The Contractor must confirm that he will conform to the requirements of this SOP and any other documents provided to him by Transnet during tender.
- 5.8.3 The Contractor must recommend a suitably qualified, competent person to fulfill the role of the Contractor's EO at tender and if accepted by Transnet this person must be appointed when the Contract is awarded for the duration of construction. Should this person be replaced for whatever reason, the Contractor shall ensure that a person of similar qualification and competency is appointed in his/her place before the previous incumbent vacates his/her position.
- 5.8.4 The Contractor must obtain any relevant environmental approvals required by his activities that have not been obtained by Transnet e.g. permits for the destruction of protected plant species; grave relocation permits etc.
- 5.8.5 The Contractor shall have overall accountability for environmental compliance on site and will be held liable for any non-compliance with environmental statutes or non-conformances with this SOP due to his negligence.

## **5.9 Reporting Lines**

- 5.9.1 The organisational structure identifies and defines the responsibilities and authority of the various entities involved in the project. All instructions and official communications regarding environmental matters will follow the organisational structure shown in Figure 1.
- 5.9.2 All instructions that relate to the SOP will still be given to the Contractor via the Transnet PM. In an emergency situation, however, the Transnet PER may give an instruction directly to the Contractor. Environmental Management of the site will be an item on the agenda of the monthly site meetings, and the Transnet PER will attend these meetings on request by the contractor. If at any time the Transnet

PM is uncertain in any way with respect to an environmentally related issue or specification in the SOP, he will consult with the Transnet PER .



**Figure 1: Typical Transnet Organogram for Construction Environmental Management<sup>2</sup>**

## 6. STANDARD OPERATING PROCEDURE

### 6.1 Tender Stage (prior to Contract Award)

- The Transnet PM appoints or assign a Project Environmental Resource/s<sup>3</sup>.
- The Transnet PER requests the draft tender from the Transnet Procurement Department
- Transnet Procurement routes the draft tender to the Transnet PER

<sup>2</sup> Structure dependent on OD own structure and organizational operating model

<sup>3</sup> Project complexity will determine the final environmental management structure on the project.

- The Transnet PER ensures the tender includes all relevant environmental documents and signs the routing slip.
- The Transnet Procurement Department issues the tender to prospective Contractor(s).
- The Contractor submits his bid which MUST include: a commitment to conform to this SOP signed by the duly delegated person; recommendation of a suitably qualified, competent person to fulfill the role of the Contractor's EO; Environmental Policy; and EMP
- After submission the Transnet Procurement Department will invite the Transnet PER to evaluate tender submissions (environmental section);
- The Transnet PER evaluates the prospective Contractor's environmental submission.
- The Contract is awarded to the successful bidder.

## **6.2 Construction Stage (prior to Site Access)**

- The Contractor appoints the Contractor's Environmental Officer (EO) accepted by Transnet SOC Ltd.
- The Contractor provides his EO with all documents submitted during tender, including but not necessarily limited to:
  - All environmental documents provided by Transnet in the tender e.g. policies, SOPs, standards, environmental approvals etc;
  - commitment to conform to this SOP; and
  - The EMP.
- The Contractor's EO conducts an activity-based environmental risk assessment;
- The Contractor's EO develops an appropriate environmental file for approval by the Transnet PER, including but not necessarily limited to all the documents specified in Section 5.7 above (the environmental file must always be available and up to date on the construction site);
- The Contractor's EO submits the environmental file for acceptance to the Transnet PER;

- Once accepted, the Transnet PER recommends that site access be granted to the Transnet PM; and
- The Transnet PM issues the Contractor with a Site Access Certificate

### 6.3 Construction Stage (post Site Access)

- The Transnet PER inducts all Contractor's staff on the environmental requirements of the site;
- The Transnet PER has an inception meeting with the Contractor's EO on site where the following is agreed:
  - The contents of the contractor's environmental file (in addition to what was approved prior to granting site access). This will include but not necessarily be limited to: a list of interested and affected parties that may be impacted by construction e.g. surrounding landowners, nearby communities etc.; energy consumption information; water use information; environmental induction and awareness information; activity-based environmental method statements; complaints records; record of external communications; environmental incident reports; minutes of contractors environmental meetings.
  - The composition of the Project Environmental Specification (PES) and how it will be implemented. This will include but may not necessarily be limited to: Environmental Approvals (e.g. Environmental Authorisations, Water Use Licences, Waste Management Licences, Atmospheric Emissions Licences etc.); Environmental Management Programmes/Plans approved by external parties/authorities; and any third party auditors/monitoring specialists (e.g. Environmental Control Officers; Independent Auditors; Transnet Environmental Assurance Specialists; Water Quality Monitoring experts etc.) that have a bearing on the contractor's scope of work.
  - The frequency of inspections to be conducted by the Contractor's EO (e.g. daily, weekly etc.)
  - The frequency of inspections to be conducted by the Transnet PER (e.g. daily, weekly and/or monthly). Notwithstanding that the frequency of

Transnet PER inspections will be agreed, the Contractor may never refuse the Transnet PER

- The format used and elements to be checked during Contractor's inspections
  - Reporting frequency and requirements
  - The process to be followed in handling Environmental Occurrences and – Non-conformances
- **Note:** All the aforementioned agreements will be formalized in the form of minutes which the Transnet - and Contractor's EO must sign and must subsequently be approved by the Transnet Project Environmental Resource.
  - The Transnet PER reviews the Contractor's activity-based environmental risk assessment and instructs the Contractor's EO to submit activity-based method statements for construction activities that may pose an environmental risk (for more details on what method statements should entail the Contractor must refer to the Minimum Environmental Requirements for Construction). Only once a method statement has been approved by the Transnet PER and Transnet CM and ECO (where relevant) may the Contractor execute the relevant activity.
  - The Contractor's EO submits the method statements to the Transnet PER for approval (these must also be approved by the Transnet CM);
  - The Transnet PER compiles a site audit checklist (covering all environmental compliance and conformance requirements) for approval by the Transnet Project Environmental Manager
  - Whilst the Contractor executes the work in terms of the requirements of the Contract, the Contractor's EO and Transnet PER execute their monitoring functions as per this SOP and other monitoring stakeholders/auditors as per the PES.
  - The Transnet PER shall submit monthly reports to the Transnet CM and PM indicating the following:
    - Date of the inspection(s);
    - Details and expertise of the Transnet PER;





- Scope and purpose for which the report was prepared;
- Description of the methodology used during the inspection and report compilation;
- Compliance and/or conformance status of all relevant/individual elements as per the inspection checklist culminating in an overall compliance/conformance percentage for the project;
- Assumptions;
- Description of consultation processes undertaken during the inspection(s) with a summary and associated records of such consultations;
- Environmental incidents and non-conformances;
- Photos of pertinent construction and environmental matters that occurred on site;
- Water abstracted/withdrawn during the month (in kiloliters) as well as an indication of the source;
- Water recycled and/or reused during the month (in kiloliters);
- Waste water discharged (in kiloliters);
- Waste (both general and hazardous) disposed (in tonnages) with an indication of waste type;
- Waste recycled (in tonnages);
- Alien invasive species eradicated (in hectares);
- Number of listed species safely relocated;
- Environmental Fines, Non-Compliances or Directives issues by authorities;
- Any NEMA Section 30 or NWA Section 19 incidents;
- Environmental Grievances;
- Rehabilitated Land (in hectares);
- Number of graves and/or heritage artifacts moved;
- Energy consumption for the project [Electricity(kWh); Gas (GJ); Oil(l); Diesel(l); Petrol(l); LPG(GJ)];
- Status of previous findings and/or observations; and
- Recommendations for improvement.

## 6.4 Post Construction

- The Contractor's EO submits a rehabilitation and site closure method statement for approval by the Transnet PER and Transnet CM.
- Once approved, the Contractor implements the rehabilitation method statement accordingly.
- The Contractor's EO submits a site close-out report for acceptance by the Transnet PER and CM.
- Post rehabilitation, the Transnet PER conducts a site closure inspection to ensure all requirements of the rehabilitation method statement have been met.
- Once rehabilitation has been accepted by the Transnet PER, the Contractor's EO sends the Transnet PER a copy of the entire environmental file (original to be handed over to Transnet as per document handover requirements of the Contract).
- On receipt of the environmental file, the Transnet PER recommends that a site closure certificate can be issued to the Transnet PM.
- The Transnet PM issues the Contractor with a Site Closure Certificate.

## 7. RECORDS

7.1 The responsibility for maintaining all records required by this SOP shall rest with the Contractor's EO; Transnet PER as specified below:

Record	Maintained By
1. Transnet PER Appointment Letter	Transnet PER
2. Signed Tender Routing Slip	Transnet PER
3. Contractor's Confirmation to conform to this CEM SOP	Transnet PER; Contractor's EO
4. Recommendation of Contractor's EO	Transnet PER

Record	Maintained By
5. Contractor's Environmental Policy	Transnet PER; Contractor's EO
6. Contractor's Environmental Management Plan	Transnet PER; Contractor's EO
7. Tender Evaluation Records from Transnet PER	Transnet PER
8. Contract	Transnet PER
9. Contractor EO's Appointment Letter and CV	Transnet PER
10. Activity-Based Environmental Risk Assessment	Transnet PER; Contractor's EO
11. Contractor's Organogram	Transnet PER; Contractor's EO
12. Contractor's Contact Information	Transnet PER; Contractor's EO
13. List of Contractor's Plant and Equipment	Contractor's EO
14. List of Hazardous Substances used by Contractor	Contractor's EO
15. Material Safety Data Sheets	Contractor's EO
16. Site Layout Plan	Transnet PER; Contractor's EO
17. Site Establishment Method Statement	Transnet PER; Contractor's EO
18. Minutes of Transnet PER – Contractor's EO Inception Meeting	Transnet PER; Contractor's EO
19. Environmental Induction Attendance Register (including material used during induction)	Transnet PER; Contractor's EO
20. Activity-based Method Statements	Transnet PER; Contractor's EO

Record	Maintained By
21. Contractor's Inspection Reports	Transnet PER; Contractor's EO
22. Transnet PER Inspection Reports	Transnet PER
23. List of Local, Provincial and National Environmental legislation applicable to the site	Contractor's EO
24. Environmental Awareness Attendance Registers (including material used)	Contractor's EO
25. Environmental Incident Reports	Transnet PER; Contractor's EO
26. Minutes of SHE Meetings	Transnet PER; Contractor's EO
27. Waste Records	Transnet PER; Contractor's EO
28. Water Records	Transnet PER; Contractor's EO
29. Energy Records	Transnet PER; Contractor's EO
30. Non-Conformance Records	Transnet PER; Contractor's EO
31. Approval of Contractor's Environmental File	Transnet PER
32. Site Access Certificate	Transnet PER
33. Approved Transnet PER Checklist	Transnet PER
34. Transnet Monthly PER Reports	Transnet PER
35. Rehabilitation Method Statement	Transnet PER; Contractor's EO
36. Contractor's Site Close-Out Report	Transnet PER; Contractor's EO
37. Transnet PER Site Closure Report	Transnet PER
38. Contractor's Environmental File Handover Transmittal	Transnet PER; Contractor's EO
39. Site Closure Certificate	Transnet PER

## **8. ANNEXURES**

### **8.1 List of Construction Environmental Management Templates, Forms and Guidelines**

### **8.2 009-TCC-CLO-SUS-TMP-11386.22 - Construction Environmental Management File Index**

### **8.3 009-TCC-CLO-SUS-TMP-11386.23 - *Construction Environmental Management Process Flow***

## Annexure 8.1 List of Construction Environmental Management Templates, Forms and Guidelines

No	Item Description	Document No
1.	Construction Environmental Management File Index	009-TCC-CLO-SUS-TMP-11386.1
2.	Project Environmental Specification (PES)	009-TCC-CLO-SUS-TMP-11386.2
3.	Declaration of Understanding (Signed)	009-TCC-CLO-SUS-TMP-11386.3
4.	Contractor's Information	009-TCC-CLO-SUS-TMP-11386.4
5.	Appointment of Contractors EO and Declaration of Understanding (Including CV and Job Profile)	009-TCC-CLO-SUS-TMP-11386.5
6.	Schedule of Contractor's Construction Plant and Equipment	009-TCC-CLO-SUS-TMP-11386.6
7.	Hazardous Substances Register	009-TCC-CLO-SUS-TMP-11386.7
8.	Emergency Contacts Register	009-TCC-CLO-SUS-TMP-11386.8
9.	Energy Consumption Register	009-TCC-CLO-SUS-TMP-11386.9
10.	Water Usage Register	009-TCC-CLO-SUS-TMP-11386.10
11.	Project Start-Up Checklist	009-TCC-CLO-SUS-TMP-11386.11
12.	Site Access Certificate	009-TCC-CLO-SUS-TMP-11386.12
13.	Method Statement Register	009-TCC-CLO-SUS-TMP-11386.13
14.	Method Statements	009-TCC-CLO-SUS-TMP-11386.14
15.	Waste Disposal Register	009-TCC-CLO-SUS-TMP-11386.15
16.	Daily Inspection Checklist	009-TCC-CLO-SUS-TMP-11386.16
17.	Weekly Inspection Checklist	009-TCC-CLO-SUS-TMP-11386.17
18.	Monthly Inspection Checklist	009-TCC-CLO-SUS-TMP-11386.18



No	Item Description	Document No
19.	Public Complaints Register	009-TCC-CLO-SUS-TMP-11386.19
20.	Application for Exemption	009-TCC-CLO-SUS-TMP-11386.20
21.	Site Closure Certificate	009-TCC-CLO-SUS-TMP-11386.21
22.	Contractor's Environmental Management File Handover	009-TCC-CLO-SUS-TMP-11386.22
23.	Basic Environmental Rules for Visitors	009-TCC-CLO-SUS-GDL-11386.23
24.	Basic Environmental Rules for Contractors	009-TCC-CLO-SUS-GDL-11386.24
25.	Basic Site Procedure	009-TCC-CLO-SUS-GDL-11386.25
26.	Contractor Environmental and Sustainability Specification Guidelines (CESSG)	TRN-IMS-GRP-GDL-014.04

## Annexure 8.2 Construction Environmental Management File Index

No	Item Description	Document No
<b>1</b>	Transnet Integrated management System (TIMS) Policy Statement	-
<b>2.1</b>	Standard Operating Procedure (SOP) - Construction Environmental Management (CEM)	009-TCC-CLO-SUS-11386
<b>2.2</b>	Environmental and Sustainability Specification Guidelines	TRN-IMS-GRP-GDL-014.04
<b>3</b>	Project Environmental Specification (PES)	009-TCC-CLO-SUS-TMP-11386.2
<b>4</b>	Declaration of Understanding (Signed)	009-TCC-CLO-SUS-TMP-11386.3
<b>5.1</b>	Contractor's Information	009-TCC-CLO-SUS-TMP-11386.4
<b>5.2</b>	Contractor's Environmental Policy	-
<b>5.3</b>	Contractor's Organogram	-
<b>5.4</b>	Contractor's Environmental Management Plan	-
<b>5.5</b>	Appointment of Contractors EO and Declaration of Understanding (Including CV and Job Profile)	009-TCC-CLO-SUS-TMP-11386.5
<b>6</b>	Schedule of Contractor's Construction Plant and Equipment	009-TCC-CLO-SUS-TMP-11386.6
<b>7</b>	Hazardous Substances Register	009-TCC-CLO-SUS-TMP-11386.7
<b>8</b>	Emergency Contacts Register	009-TCC-CLO-SUS-TMP-11386.8
<b>9</b>	Energy Consumption Register	009-TCC-CLO-SUS-TMP-11386.9
<b>10</b>	Water Usage Register	009-TCC-CLO-SUS-TMP-11386.10
<b>11</b>	Training Attendance Register	TIMS Procedure
<b>12</b>	Project Start-Up Checklist	009-TCC-CLO-SUS-TMP-11386.11
<b>13</b>	Site Access Certificate	009-TCC-CLO-SUS-TMP-11386.12
<b>14</b>	Method Statement Register	009-TCC-CLO-SUS-TMP-11386.13

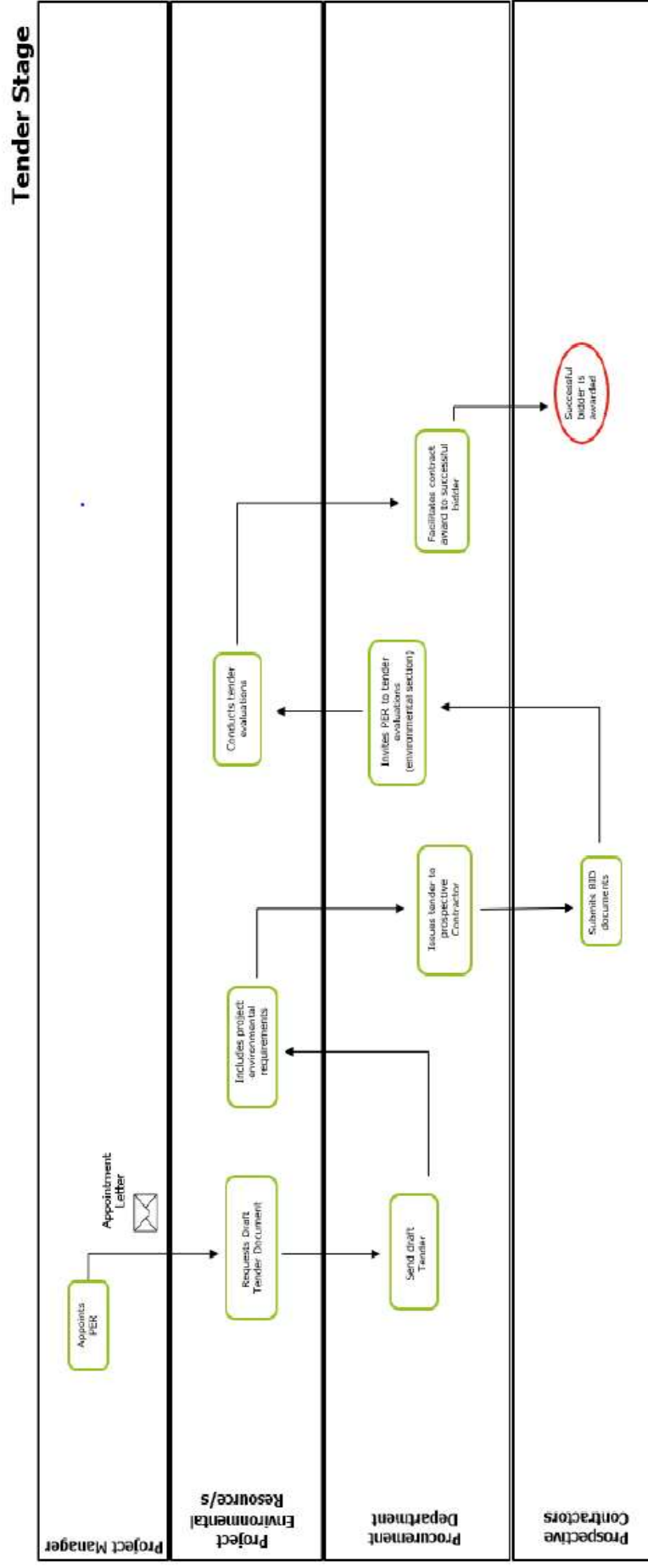


No	Item Description	Document No
15	Method Statements	009-TCC-CLO-SUS-TMP-11386.14
16	Waste Disposal Register	009-TCC-CLO-SUS-TMP-11386.15
17.1	Daily Inspection Checklist	009-TCC-CLO-SUS-TMP-11386.16
17.2	Weekly Inspection Checklist	009-TCC-CLO-SUS-TMP-11386.17
17.3	Monthly Inspection Checklist	009-TCC-CLO-SUS-TMP-11386.18
17.4	Environmental Inspection Findings Close-out Register	TIMS Procedure
18	Public Complaints Register	009-TCC-CLO-SUS-TMP-11386.19
19	Occurrence Register	TIMS Procedure
20	Transnet Occurrence Notification Report	TIMS Procedure
21.1	Environmental Occurrence Technical Form	TIMS Procedure
21.2	On-site Investigation Form – Incident Commander Report	TIMS Procedure
21.3	Investigation Form Report for Level 3 & 4 Occurrences	TIMS Procedure
21.4	Incident Commander Appointment Letter	TIMS Procedure
22	Non-Conformance Register	TIMS Procedure
23	Non-Conformance Report Form	TIMS Procedure
24	Non-Compliance Stop Certificate	TIMS Procedure
25	Application for Exemption	009-TCC-CLO-SUS-TMP-11386.20
26.1	Site Closure Inspection Form	TIMS Procedure
26.2	Site Closure Certificate	009-TCC-CLO-SUS-TMP-11386.21
26	Contractor's Environmental Management File Handover	009-TCC-CLO-SUS-TMP-11386.22



No	Item Description	Document No
27.1	Basic Environmental Rules for Visitors	009-TCC-CLO-SUS-GDL-11386.23
27.2	Basic Environmental Rules for Contractors	009-TCC-CLO-SUS-GDL-11386.24
27.3	Basic Site Procedure	009-TCC-CLO-SUS-GDL-11386.25

## Annexure 8.3 Construction Environmental Management Process Flow



## Post Site Access

