

	<b>STANDARD</b>	<b>Power Delivery Projects</b>
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Title: **Environmental Requirements for Contractors and/or Suppliers**

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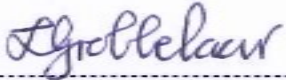

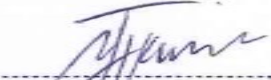
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Date: <u>09/10/2018</u>	Date: <u>10/10/2018</u>	Date: <u>2018/10/15</u>

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## **1. Introduction**

Power Delivery Projects (PDP) have been using the document, PDPMAN-PC-11 (Environmental Requirement for Contractors and Suppliers Working on Power Delivery Projects) to present the requirements to be adhered to when working for or on behalf of PDP. The document has so far become obsolete in July 2015.

This standard is meant to replace the above mentioned procedure and it shall be implemented as an official document as soon as it is approved. Power Delivery Projects' position is to partner with Contractors/suppliers who fully demonstrate commitment to the development, implementation and maintenance of an environmental management system (EMS) that conforms to the requirements of ISO 14001: 2015. The priority is to encourage Contractors/suppliers to continually contribute to the improvement of Eskom PDP EMS and improve their environmental management system and enhance service delivery by obtaining ISO 14001 certifications. These requirements are in addition to the requirements stipulated in the project specific Environmental Management Programme (EMPr), any Environmental Authorisation (EA) including any other environmental permits and licenses and Environmental Legislation.

## **2. Supporting Clauses**

### **2.1 Scope**

This document stipulates the standard requirements, by which contractors/suppliers shall manage, implement and maintain an Environmental Management System (EMS) to ensure that legal and Eskom GCD Power Delivery Projects requirements are continuously adhered to.

This standard applies to the procurement of all products and services as well as in instances where technical requirements are also being specified.

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### **2.1.1 Purpose**

The intention of this document is to specify and describe the minimum environmental requirements for all existing and potential contractors/suppliers rendering product and or services to Power Delivery Projects, and to define the environmental criteria for the evaluation and selection of Contractors/suppliers.

### **2.1.2 Applicability**

This document shall apply throughout Power Delivery Projects.

### **2.1.3 Effective date**

This standard shall be effective from the date of the signature.

## **2.2 Normative/Informative References**

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

### **2.2.1 Normative**

- [1] ISO 9001 Quality Management Systems
- [2] ISO 14001: Environmental Management Systems
- [3] National Environmental Management Act No 107 of 1998
- [4] Project Specific Environmental Management Programmes
- [5] Project Specific Permits and Licenses (Construction stage)
- [6] PDPMAN-FM-20 Environmental Tender Evaluation Template
- [7] PDPMAN-FM-102 Environmental Evaluation for Site Readiness Check sheet

### **2.2.2 Informative**

- [1] 32-95 Environmental, Occupational Health and Safety Incident Management procedure
- [2] PDPMAN-WN-14 Identification of Aspects and Assessments of Impacts

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- [3] 32-736 Corporate Document
- [4] 32-727 Eskom SHEQ Policy
- [5] PDPMAN-SG-68 PDP SHEQ Statement of Commitment

## **2.3 Definitions**

- 2.3.1 **Environmental Impact:** any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.
- 2.3.2 **Environmental Authorisation:** authorisation obtained from a competent authority responsible for authorising listed activities in terms of the National Environmental Management Act No 107 of 1998.
- 2.3.3 **Environmental Management Programmes:** it is a programme/plan of action for achieving organisational objectives relating to the mitigation of environmental impacts of its activities, products and services.
- 2.3.4 **Environmental Performance:** the measurable results of an organization's management of its environmental aspects.
- 2.3.5 **Organisation:** a company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration.

Note: For organizations with more than one operating unit, a single operating unit may be define

- 2.3.6 **Record of Decision:** authorisation obtained from a competent authority responsible for authorising listed activities in terms of the Environmental Conservation Act No 73 of 1989.
- 2.3.7 **Contractor/Supplier Organisation:** organisation or person that provides a product or service.

EXAMPLE: Produces, distributor, retailer or vendor of a product, or provider of a service or information.

NOTE 1: A supplier can be internal or external to the organisation.

NOTE 2: In a contractual situation, a supplier is sometimes called "contractor".

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## **2.4 Abbreviations**

<b>Abbreviation</b>	<b>Explanation</b>
EA	Environmental Authorisation
ECO	Environmental Control Officer
EMPr	Environmental Management Programme
EMS	Environmental Management System
ISO	International Organization for Standardization
PDP	Power Delivery Projects
RoD	Record of Decision
SDS	Safety Data Sheets
SHE	Safety Health and Environmental
SHEQ	Safety Health Environment and Quality

## **2.5 Roles and Responsibilities**

### **2.5.1 The SHEQ Manager PDP shall be responsible for:**

2.5.1.1 Ensuring that all the Grids partake in the development and enforcement of these requirements;

2.5.1.2 Assessing the level of conformance of this document by the Grids;

2.5.1.3 Advising on the areas of improvement of this document.

### **2.5.2 The Senior Environmental Advisor: Grid shall be responsible for:**

2.5.2.1 Ensure that this standard is issued out by the Project Managers and/or Procurement department during tender enquiry stage;

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2.5.2.2 Evaluate compliance to the requirements of the standard during the various phases of the project life cycle.

### **2.5.3 The Contractor shall be responsible for:**

2.5.3.1 Prepare the documentation and Implementation of the requirements as stipulated in this standard.

2.5.3.2 Comply to all environmental permits and licences and if there is non-compliance, the transgressions and fines document (Appendix F) will be implemented.

## **2.6 Process for Monitoring**

Compliance to this standard will be monitored during tender evaluations, periodic inspections and audits on projects.

## **2.7 Related/Supporting Documents**

**2.7.1 PDPMAN-PC-11:** Environmental Requirement for Contractors and Suppliers Working on Power Delivery Projects

## **3. Standard Requirements**

### **3.1 Organisation Environmental Management System Requirements**

3.1.1 The Organisation shall have a fully documented, implemented and maintained environmental management system, which complies with the requirements of the ISO 14001 or their environmental management system shall carry valid certification from an acceptable EMS Certification body as indicated in the applicable Power Delivery Projects invitation.

3.1.2 The Organisation shall be responsible for ensuring that all their Supplier Organisation's environmental programmes comply with the Power Delivery Projects requirements. The supplier shall define the specific environmental control elements applicable to the scope of works.

3.1.3 The Organisation shall inform Power Delivery Projects of any changes to the environmental management system or staff that is relating to the scope of work that will affect the environmental system prior to implementation of these changes.

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### **3.2 Environmental Planning**

3.2.1 Contractors/suppliers shall produce either the Proof of Management Systems Accreditation/Certification or an Environmental Management System in accordance with the ISO 14001 and/or Integrated Management Systems standard as per the Environmental Tender Evaluation Template.

3.2.2 All production/service provision shall be carried out in accordance with documented environmental Aspects and Impacts registers and create procedures to deal with those Aspects that may have significant Impact on the Environment.

3.2.3 The Organisation's Environmental Management Programmes shall identify/indicate/define/reflect the following information relevant to the Organisation's scope of supply responsibility:

3.2.4 Scope of Work.

3.2.5 Upon revision, be subjected to review and approval by all parties previously responsible, prior to implementation.

3.2.6 Be in any documented format deemed most suitable i.e. text, diagrammatic, matrix etc.

3.2.7 Be reviewed by Power Delivery Projects or its Environmental representatives for acceptability, and shall allow for the insertion of Power Delivery Projects specific requirements, and accepted.

3.2.8 Any revisions to the plans/programmes shall require the agreement of Power Delivery Projects or its Environmental representatives prior to the commencement of work involving an activity affected by such changes.

3.2.9 Form part of the Organisation's documented EMS, and shall be internally reviewed, and formally approved.

3.2.10 Cover each distinct stage of work performed/undertaken and it shall include but not be limited to:

- Site establishment
- Access control to site
- Site construction and installation work (Civil, Electrical, and Power Lines etc.)
- Manufacturing (Site, Factory, Temporary workshops etc.)

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- Storage areas (Plant, Equipment, Free Issue Material etc.)
- Waste Management Plan (or Method Statement)
- Site and Vegetation Clearing
- Handling of Hazardous Chemical substances
- Site management (Water management, Dust and Noise, Land owner Liaison, final release and settlement of disputes and claims)
- Rehabilitation
- Site demobilization

3.2.11 Specific environmental monitoring/verification activities to be undertaken on its sub-contractors and/or suppliers.

3.2.12 Different physical locations where the Organisation's work will be performed, the nature and extent thereof and include work to be performed by Supplier Contractors/suppliers .

3.2.13 Work to be performed by Supplier Organisation's, and their pre-determined scoping requirements.

3.2.14 Waste management plan/procedure that includes waste segregation and minimization, Waste disposal register, anticipated waste streams to be generated and related legal requirements applicable to waste management for the specific PDP Projects.

3.2.15 Environmental records to be retained specific to the service/product, including the format and retention periods that will apply, shall include but not be limited to:

- Environmental Authorisation (including all other permits and licenses)
- Project specific Environmental Management Plan/Programme
- Aspects and Impacts register
- Incident register and Investigation reports
- Non – Conformance register
- Public Complaints register
- Waste Stats – (reused, recycled, donated and disposal records),
- Water usage records

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- Hazardous Substances registers and Safety Data Sheets
- Records of Internal and External Audits and Inspections (reports, findings, action plans and close outs)
- Records of site inspections conducted (Checklists and Reports)
- ECO reports (where applicable)
- Energy Efficiency Checklists

NOTE: The above can be submitted and summarised in a form of a controlled register

3.2.16 The organisational structure indicating the current management hierarchy as per scope of work. The structure shall extend from the policy maker down to the supervisory level, within each of the different production/services facilities/operations. The structure must clearly show lines of responsibility and authority, and shall reflect both the names of the appointed persons, and their respective designations and position.

3.2.17 The management representative (i.e. appointed responsible authority of site) having overall responsibility for environmental management and planning.

3.2.18 Qualified person (National Diploma or a Degree in Environmental Sciences/Management or Nature Conservation or relevant Natural Sciences) having the responsibility for monitoring environmental planning and activities, and their relationship within the management structure according to the Project EMPr and/or EA requirements.

### **3.3 Organisational Environmental Aspects and Impacts Registers**

3.3.1 The Organization Aspects and Impacts register shall: identify/indicate/define/reflect the following relevant to the supplier's scope of supply responsibility as per of ISO 14001.

3.3.2 Power Delivery Projects requires that the organisation's Aspects and Impacts documentation meets the additional requirements below as a minimum:

3.3.3 Identify and list all environmental aspects per activity.

3.3.4 Determine all the possible Environmental Impacts for each of the identified Aspects.

3.3.5 Apply significance criteria before and after controls.

3.3.6 All Aspects shall be assessed before and after controls.

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3.3.7 Identify significant Aspects and Impacts and establish programmes/ procedures how to address the impact to the Environment, the latter shall be prioritised in these programmes/procedures.

3.3.8 The Impacts shall be rated and must be included in a compiled Environmental Aspects and Impacts register (See Appendix A).

3.3.9 Approval of the Aspects and Impacts register by the contractors/suppliers management.

3.3.10 It must be a revision controlled document.

3.3.11 An example of the Environmental Criteria for determining the significant impacts are explained in Appendix B as Table 1, 2, 3, 4, and 5.

### **3.4 Application of Significant Aspects Data and Control**

3.4.1 Significant aspects shall be considered in the setting of Objectives and Targets and the determination of the risks and opportunities at the project.

3.4.2 Planned actions and impact control (corrective) measures for the medium and high significant impacts shall be undertaken through management programmes and or through operational controls.

### **3.5 Access to Premises, Facilities and Documentation/Information**

3.5.1 Power Delivery Projects or its inspection agency or any other Eskom department shall be afforded access to all areas of the Organisation and its Supplier Organisation's premises and facilities, to conduct environmental audits, surveillance or inspections to verify compliance with agreed, Project EMPr and/or EA, and ISO14001: EMS requirements.

3.5.2 All environmental system documentation, records, reports etc., shall be made available for review when requested by Power Delivery Projects or its appointed inspection agency.

3.5.3 The Organisation shall provide suitable facilities to Power Delivery Projects or its appointed environmental agency, and shall supply any assistance necessary for the performance of any audit, surveillance and/or inspection activities to be conducted by Power Delivery Projects.

3.5.4 The Organisation shall ensure a safe working environment to Power Delivery Projects or its appointed environmental agency, by informing it of the necessary safety requirements and possible safety hazards.

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### **3.6 Organisation Monitoring, Measurement, Analysis and Evaluation of Compliance**

3.6.1 The organization shall establish, implement and maintain a procedure / processes to monitor measure and analyse, on their activities that may have a significant environmental impact.

3.6.2 The procedure / process shall include the documenting of information to monitor performance, applicable operational controls (method statements) and conformity with the organization's environmental objectives and targets, Project EMPr and/or the EA.

3.6.3 The organization shall establish, implement and maintain a procedure(s)/process (es) for periodically evaluating compliance with applicable compliance obligations as well as the requirements of the Project EMPr and/or the EA. The organization may wish to combine this evaluation with the programmes that address their significant environmental Impacts.

3.6.4 The organization shall keep records of the results of the periodic evaluations, these shall be but not limited to:

- A procedure for Monitoring, Measurement, Analysis and Evaluation of Compliance
- Document specific checklists and registers
- Monitoring/Inspection reports
- Findings and close out reports
- Natural resource consumption (Water, fuel, electricity usage etc.)

### **3.7 Environmental Documentation submission to Power Delivery Projects**

#### **3.7.1 Tender Evaluation phase**

3.7.1.1 Documentation shall be prepared and submitted to Power Delivery Projects, in response to either of the following eventualities:

- An Eskom invitation to tender for contract
- An Ad-hoc evaluation required by Power Delivery Projects. Documents to be submitted to Power Delivery Projects premises include, but may not be limited to the following:

3.7.1.2 The completed environmental enquiry checklist for Tender Returnables (Appendix C).

3.7.1.3 Proof of the Organisation's EMS or Certification.

3.7.1.4 A controlled copy of the contractors/suppliers environmental plan as stipulated in 3.7.3 of this standard.

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3.7.1.5 A controlled copy of the Organisation's proposed Aspects and Impacts register including the rating criteria stipulated in Appendix B: Tables 1 - 5, as it relates to the product/service in question.

3.7.1.6 Sample of Environmental Bill of Quantities

3.7.1.7 Documents (i.e. Certificates of compliance and/or conformance) presented at the tender phase may be subjected to verification.

### **3.7.2 Organisation Assessment and/or Verification phase**

3.7.2.1 Projects within PDP may be subjected to the mandatory implementation of the environmental management systems that may imply EMS implementation and assessments including inspections and audits. This assessment will be applicable to all medium to long term projects and also dependent on the risks of the scope of work.

3.7.2.2 The Organisation shall give written permission to its product and environmental management system certification bodies, and/or any inspection authority acting on its behalf, to make available all information at its disposal, and without any reservation, for review by Power Delivery Projects, or its appointed inspection agency.

### **3.7.3 Contract Award (Qualification) phase**

The following documents shall be prepared and maintained for the duration of the contract and/or qualification validity period, and shall be submitted to Power Delivery Projects or its inspection agency prior to commencement of the works. Documents to be submitted to Power Delivery Projects premises include, but may not be limited to the following:

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3.7.3.1 A completed and signed contractor Environmental Requirements Pro – Forma (Appendix D).

3.7.3.2 Contractors/suppliers Environmental Plan and Aspects and Impact register in accordance with Power Delivery Projects **specific** requirements.

3.7.3.3 EMS documentation as required for the Works.

3.7.3.4 All documentation shall be submitted to Power Delivery Projects for Evaluation 14 days after contract award date.

### **3.7.4 Contract Execution phase**

3.7.4.1 Organisation's EMS records.

3.7.4.2 Power Delivery Projects accepted concessions / production permits as applicable.

3.7.4.3 Corrective actions taken as a result of non-conformances raised by either the Organisation or Power Delivery Projects.

3.7.4.4 Organisation's certificates of conformance.

3.7.4.5 The product/service in processing and/or final completed state of conformance to activities will include but not be limited to the following:

- Environmental Authorisation (including all other permits and licenses)
- Project specific Environmental Management Plan/Programme
- Aspects and Impacts register
- Incident register and Investigation reports

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- Non – Conformance register
- Public Complaints register
- Waste Stats – (reused, recycled, donated and disposal records),
- Water usage records
- Hazardous Substances registers and Safety Data Sheets
- Records of Internal and External Audits and Inspections (reports, findings, action plans and close outs)
- Records of site inspections conducted (Checklists and/or reports)
- ECO reports (where applicable)
- Energy Efficiency Checklists
- All organisational and service providers agreements/contracts (i.e. Waste management services and Water supply).

NOTE: The above can be submitted and summarised in a form of a controlled register

### **3.7.5 Contract/Order completion**

Documents to be submitted to Power Delivery Projects on completion of scope of works, which shall accompany every shipment of product to its specified delivery destination(s) includes, but may not be limited to the following:

3.7.5.1 Organisation certificates of conformance.

3.7.5.2 Organisation test certificates, etc. as required by the applicable technical specification(s).

3.7.5.3 Inspection release reports issued by Power Delivery Projects, or its inspection agency, including but may not limited to:

- ECO close out report
- Final rehabilitation report
- Final site close out audit/inspection report/NCR close out

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### **3.8 Forms and Records**

Power Delivery Projects will issue a separate environmental returnable (PDPMAN-FM-120) form in conjunction with this standard, on each occasion of a formal invitation to tender etc. The environmental schedule's primary objective is to provide the Organisation with a standardized means of providing Power Delivery Projects with a formal response in terms of its own organizational environmental practices, capabilities etc.

### **Appendixes**

Appendix A – Aspects and Impacts register

Appendix B – Table 1 - 5

Appendix C – Tender returnable form

Appendix D – Environmental Requirements Pro-forma

Appendix E – Method Statement Template

Appendix F – Transgressions and Fines

## **4. Acceptance**

This document has been seen and accepted by:

<b>Name</b>	<b>Designation</b>
Naresh Hari	General Manager - PDP
Nozipho Masakona	Executive Projects Manager – PDP 765kV Projects
Bob Naraghi	Executive Projects Manager – PDP Central Grid
Johan Bornmann	Executive Projects Manager – PDP Cape Grid
Clint Fisher	Executive Projects Manager – PDP Northern Grid
Geoffrey Small	SHEQ Manager - PDP
Bongani Mabena	SHEQ Manager – PDP Cape Grid
Puleng Tsatsi	SHEQ Manager – PDP 765kV Projects

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<b>Name</b>	<b>Designation</b>
Elliot Baduza	Acting SHEQ Manager – PDP Central Grid
Wayne Oberem	SHEQ Manager – PDP Northern Grid

## **5. Revisions**

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
June 2016	0	Tshinanne Mutshatshi	New document and also meant to replace PDPMAN-PC-11
October 2018	1	Lene Grobbelaar	Include transgressions and fines Appendix

## **6. Development Team**

The following people were involved in the development of this document:

- Trevor O'Donoghue
- Tshinanne Mutshatshi
- Chris Buchner
- Lene Grobbelaar
- Takalani Thimisha
- Alistair Burt
- Bukelwa Masiza
- Luckyboy Isaac

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## **7. Acknowledgements**

The compiler would like to acknowledge the PDP Environmental Management Team for putting this document together.

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Appendix A – ASPECTS AND IMPACT REGISTER

REFERENCE NUMBER:  
ENVIRONMENTAL ASPECTS & IMPACTS REGISTER  
COMPANY:  
REV:  
DATE:

1. Identify Aspects		2. Identify Impacts				3. Analyse Risks				4. Evaluate Risks				5: Treat Risks							
Activity	Aspects	No.	Impacts			Owner	Causes of the impact	What are the Consequences ?	Existing Controls		RCE Risk Effectiveness	Environmental LIKELIHOOD	Priority Rating	Additional Tasks		Monitoring Mechanisms	Control Owner	Control Impacts	Legal & other requirements (Prescription)		
			Actual	Potential	Positive																
Condition associated with an Aspect	An Aspect is anything that is likely to lead to an event that will have an adverse impact on the environment. An aspect can pose more than one impacts.		Any change to the environment whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.			Who is accountable for making sure the controls and monitors are: - in place, - implemented, - regularly reviewed for effectiveness.	What causes the impact to come into effect?	What is the unexpected adverse impact on the objective?	Include: - Preventative Controls (actions taken to eliminate aspects or reduce the likelihood of its occurring), and - Reactive Controls (action taken to reduce the immediate impact of the aspect occurring)				Include: - Preventative Controls (actions taken to eliminate Aspects or reduce the likelihood of its occurring), and - Reactive Controls (action taken to reduce the immediate impact of the aspect occurring)		How we know if we are succeeding. Include comments on effectiveness.	Person allocated the responsibility for implementing the agreed controls	What additional impacts are presented by the chosen control. If significant, these will also require a formal Risk Assessment.	Where relevant, list the relevant legislative and or Eskom requirements that prescribe the control.			
Site Establishment	1. Vegetation clearing	PDP 1.1	Loss of biodiversity - cutting of protected trees	x		SHEQ Managers	1. Executing the aspect	Loss of biodiversity	1. EMP		5	D	1. Ensure compliance to EMP/RoD. Permits to cut	2	D	1	EMP/RoD Audits	Contractor EO/EC	None	1. NEMBA, 2004 S 56 & 57 2. NFA, 1996 S 12 & 15	
		PDP 1.2	Fauna habitat loss	x		SHEQ Managers	1. Executing the aspect	Fauna habitat loss	1. EMP		5	D	1. Ensure compliance to EMP/RoD	3	C	1	EMP/RoD Audits	Contractor EO/EC	None	1. NEMBA, 2004 S 56 & 57	
	2. Digging	PDP 2.1	Soil erosion		x		SHEQ Managers	1. Not executing the rehabilitation plan	Soil erosion	1. Implementation of Rehabilitation Plan		5	C	1. Ensure compliance to EMP/RoD (rehabilitation plan)	3	C	1	EMP/RoD Audits	Contractor EO/EC	None	1. NEMA S 28
		PDP 2.2	Emission of dust	x			SHEQ Managers	1. Executing the aspect	Emission of dust	1. Implementation of Dust Management Plan		3	C	1. Ensure compliance to EMP/RoD (dust management plan)	2	C	1	EMP/RoD Audits	Contractor EO/EC	None	1. NEM: ADA S32
		PDP 2.3	Land pollution		x		SHEQ Managers	1. Lack of knowledge (procedure); Waste Management &	Land pollution	1. Implementation of Waste Management Procedure		2	C	1. Implement procedure & Waste Manifest & reconciliations	1	D	1	EMP/RoD Audits	Contractor EO/EC	None	1. NEM: WA
Prepared by:	Signature:	Date:																			
Approved by:	Signature:	Date:																			
Authorised by:	Signature:	Date:																			

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**Appendix B: TABLE 1 – 5**

**Table 1: Likelihood Criteria**

Category	Criteria
<b>E</b>	<ul style="list-style-type: none"> <li>• 99% probability, or</li> <li>• impact is occurring now, or</li> <li>• could occur within “days to weeks”</li> </ul>
<b>D</b>	<ul style="list-style-type: none"> <li>• &gt;70% probability, or</li> <li>• balance of probability will occur, or</li> <li>• could occur within “weeks to months”</li> </ul>
<b>C</b>	<ul style="list-style-type: none"> <li>• &gt;20% probability, or</li> <li>• may occur shortly but a distinct probability it won’t, or</li> <li>• could occur within “months to years”</li> </ul>
<b>B</b>	<ul style="list-style-type: none"> <li>• &gt;5% probability, or</li> <li>• may occur but not anticipated, or</li> <li>• could occur in “years to decades”</li> </ul>
<b>A</b>	<ul style="list-style-type: none"> <li>• &lt;5% probability</li> <li>• occurrence requires exceptional circumstances</li> <li>• exceptionally unlikely, even in the long term future</li> <li>• only occur as a “100 year event”</li> </ul>

**Table 2: Environmental Consequence Criteria**

Rating	Environment
<b>6</b>	<ul style="list-style-type: none"> <li>- Irreversible long term environmental harm.</li> <li>- Community outrage- potential large-scale class action.</li> <li>- Public inquiry by Government agency</li> <li>- Potential for significant legal sanctions against Eskom</li> </ul>
<b>5</b>	<ul style="list-style-type: none"> <li>- Prolonged environmental impact.</li> <li>- High-profile community concerns raised – requiring significant rectification measures.</li> <li>- Government agency inquiry.</li> </ul>
<b>4</b>	<ul style="list-style-type: none"> <li>- Measurable environmental harm – medium term recovery.</li> <li>- High potential for complaints from stakeholders and community.</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>- Medium term recovery, immaterial effect on environment/community</li> <li>- Required to inform Government agency, (e.g.: noise, dust)</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>- Short term transient environmental or community impact- some clean-up costs</li> </ul>

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<b>1</b>	- Negligible impact on the environment - little action required.
----------	--

**Table 3: Risk Matrix**

<b>Consequences</b>	<b>6</b>	III	II	I	I	I
	<b>5</b>	III	II	II	I	I
	<b>4</b>	IV	III	II	I	I
	<b>3</b>	IV	III	II	II	I
	<b>2</b>	IV	IV	III	II	II
	<b>1</b>	IV	IV	III	III	III
		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
		<b>Likelihood</b>				

**Table 4: Priority for Attention**

Priority	Suggested timing of treatment	Authority for continued toleration of residual risk
<b>I</b>	Short term. Normally within 1 month.	Managing Directors, Chief Executive and Board
<b>II</b>	Medium term. Normally within 3 months.	Managing Directors, Senior General Managers and General Managers
<b>III</b>	Normally within 1 year	Senior General Managers, General Managers and Managers
<b>IV</b>	Ongoing control as part of a management system.	All staff

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**Table 5: Risk Control Effectiveness**

<b>RCE</b>	<b>Guide</b>
<b>Fully effective</b>	Nothing more to be done except review and monitor the existing controls. Controls are well designed for the Risk, are largely preventative and address the root causes and Management believes that they are effective and reliable at all times. Reactive controls only support preventative controls.
<b>Partially effective</b>	Most controls are designed correctly and are in place and effective. Some more work to be done to improve operating effectiveness or Management has doubts about operational effectiveness and reliability.
<b>Ineffective</b>	While the design of controls may be largely correct in that they treat most of the root causes of the Risk, they are not currently very effective. There may be an over-reliance on reactive controls. <b>Or</b> / Some of the controls do not seem correctly designed in that they do not treat root causes, those that are correctly designed are operating effectively.
<b>Totally ineffective</b>	Significant control gaps. Either controls do not treat root causes or they do not operate at all effectively. Controls, if they exist are just reactive.
<b>None</b>	Virtually no credible control. Management has no confidence that any degree of control is being achieved due to poor control design and/or very limited operational effectiveness.

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**Appendix C: Tender returnable form**

QUALITATIVE EVALUATION CRITERIA		WEIGHT AND SCORE
DOCUMENT REQUIREMENTS	% RESULT	% RESULT
<b>SECTION A: Environmental Management System Requirements ISO 14001:2004</b>		
Environmental Policy Manual as per Scope of Works PDPMAN-SP-37 Rev. 0 Clause 4.4.1		
		<b>Weighted 40</b>
1 Environmental Policy Signed and Authorized (Clause 4.2)	1	1
2 Planning (Clause 4.3)	1	1
3 Implementation and Operation (Clause 4.4)	1	1
4 Checking (Clause 4.5)	1	1
5 Environmental documentation (ISO 14001:2004 EMS manual)	1	1
6 Management review (Clause 4.6)	1	1
ISO 14001: 2004 Mandatory Procedures		
1 Environmental Aspects (Clause 4.3.1)	1	1
2 Environmental legal and other requirements (Clause 4.3.2)	1	1
3 Competence training and awareness (Clause 4.4.2)	1	1
4 Environmental Communication (Clause 4.4.3)	1	1
5 Control of documents (Clause 4.4.5)	1	1
6 Non-Conformity, corrective – and preventive action (Clause 4.5.3)	1	1
7 Environmental Emergency and Response (Clause 4.4.7)	1	1
8 Monitoring Measurement and evaluation of compliance (Clause 4.5.1, & 4.5.2)	1	1
9 Control of Records (Clause 4.5.4)	1	1
10 Internal Audit (Clause 4.5.5)	1	1
Sub-Section A Score		<b>16</b>
		<b>Max</b>
<b>Subsection A (Option 1) Result as Percentage = Score Obtained over Maximum Allocated X 100</b>		
	% X Weight	%
<b>SECTION A: Environmental Management System Requirements ISO 14001: 2004</b>		
<b>Option 2</b>		
Valid certification of the Environmental Management System by an accredited body as per Scope of Works PDPMAN-SP-37 Rev.0 Clause 4.4.1		
		<b>Weighted 40</b>
1 Product/Service Scoping defined	1	1
2 Approved and Authorized	1	1
3 Recognized International Accredited Affiliation	1	1
4 Validity	1	1
Sub-Section A Score		<b>4</b>
		<b>Max</b>
<b>Subsection A (Option 2) Result as Percentage = Score Obtained over Maximum Allocated X 100</b>		
	% X Weight	%
<b>SECTION B: Environmental Planning Requirements PDPMAN-SP-37 Rev.0</b>		
Environmental Management Plan as per Scope of Works Clause 4.2.3		
		<b>Weighted 30</b>
4.2.3.1 Define Scope	1	1
4.2.3.2 Form part of the Organization's documented EMS	1	1
4.2.3.3 Cover each distinct stage of work	1	1
4.2.3.4 Customers formal approval	1	1


4.2.3.5 Revision be subject to review	1	1
4.2.3.6 Documented format	1	1
4.2.3.7 Review process by Power Delivery Projects specific requirements	1	1
4.2.3.8 Revisions to the plans shall require the agreement of Power Delivery Projects	1	1
4.2.3.9 Specific Environmental Monitoring requirements	1	1
4.2.3.10 Index of Relevant Environmental Aspects and Impacts	1	1
4.2.3.11 Locations of the Organization's work to be done and work to be done by Site - Organization	1	1
4.2.3.12 Supplier Organization's and their pre-determined scoping requirements	1	1
4.2.3.13 Waste man plan - segregation, -separation, - disposal register and predicted waste streams	1	1
4.2.3.14 Environmental records to be retained specific to the scope and retention periods	1	1
4.2.3.15 Organizational structure indicating the current management	1	1
4.2.3.16 Management representative having overall responsibility for Environmental Management	1	1
4.2.3.17 Personnel performing Environmental management on site implementing EIM/ and/or EA	1	1
Sub-Section B Score		<b>17</b>
		<b>Max</b>
<b>Subsection B Results Percentage = Score Obtained over Maximum Allocated X 100 % X Weight</b>		
	%	%
<b>SECTION C: Organizational Aspects and Impacts Registers PDPMAN-SP-37 Rev.0</b>		
Environmental Aspects and Impacts registers as per Scope of Works Clause 4.3		
		<b>Weighted 30</b>
4.3.1.1 D & reflect the relevant to the supplier's scope and per clause 4.3.1 of ISO 14001:2004	1	1
4.3.2.1 Identify and list all environmental Aspects per activity	1	1
4.3.2.2 Determine all the possible Environmental Impacts for each of the identified Aspects	1	1
4.3.2.3 Apply significance criteria before and after controls	1	1
4.3.2.4 All aspects shall be assessed before and after controls	1	1
4.3.2.5 Identify significant Aspects and Impacts and establish procedures for their control	1	1
4.3.2.6 Impacts rated according to Eskom risk criteria, logged and registered (PDPMAN-PC-14)	1	1
4.3.2.7 Significant aspects have been considered in setting of Environmental Objectives and Targets	1	1
4.3.2.8 Approved by organizations management	1	1
4.3.2.9 Revision controlled document	1	1
Sub-Section C Score		<b>10</b>
		<b>Max</b>
<b>Subsection C Results Percentage = Score Obtained over Maximum Allocated X 100 % X Weight</b>		
	%	%
<b>FINAL TOTAL SCORE = (SECTION A - Option 1) or (Section A - Option 2) + (B) + (C) AS A PERCENTAGE</b>		
<b>THRESHOLD</b>		
The score that each tenderer receives will provide a numeric basis for tender comparison. The minimum weighted average score required for a tender to be considered must be 80% or above.		

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**Appendix D: CONTRACTOR ENVIRONMENTAL REQUIREMENTS PROFORMA**

<b>CONTRACTOR ENVIRONMENTAL REQUIREMENTS PROFORMA</b>		
		
<b>Name of the Organisation</b>		
<b>Vendor Number</b>		
<b>Contract Number</b>		
<b>Scope of Work</b>		
<b>DECLARATION BY POWER DELIVERY PROJECTS CONTRACTOR</b>		
<p>1. I undertake to adhere to the requirements as set out in:</p> <ul style="list-style-type: none"> <li>- The project Environmental Management Programme, Environmental Authorisation and all relevant environmental permits applicable</li> <li>- Environmental Requirements for Organizations set out in PDPMAN – ST - 37</li> </ul> <p>2. I undertake to comply with all applicable environmental legal and other requirements</p> <p>3. I undertake to comply with Eskom 's environmental standards, policies and procedures where applicable</p> <p>4. I am fully aware and will comply with the environmental transgressions fine systems</p> <p>5. I pledge to inform all staff of their role in managing environmental impacts on site</p> <p>6. I am fully aware that incidents must be reported within 24 hours of occurrence</p> <p>7. I pledge to implement environmental best practice on site at all times during the contract</p> <p>8. I pledge that all non-conformances issued to us will be addressed promptly and appropriately so as to redeem / mitigate the damage.</p>		
<p>..... (full name) acknowledge and accept the responsibility to comply and conform to all the above mentioned requirements.</p>		
<b>Designation (Contractor)</b> .....	<b>Signature</b> .....	<b>Date:</b> .....
<b>Contact Number</b> .....		
<b>Eskom: Project Manager</b>	<b>Signature of Project Manager:</b> .....	<b>Date:</b> .....

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**Appendix E: METHOD STATEMENT TEMPLATE**

<b>Document Reference</b>	<b>Revision no</b>	<b>Description of Revision</b>	<b>Author / Editor</b>	<b>Date</b>

(Company logo)

**Project Name**

**Method Statement Title**

<b>Compiled by</b>	<b>Authorised by</b>	<b>Approved by</b>
<b>Date</b>	<b>Date</b>	<b>Date</b>
<b>Signature</b>	<b>Signature</b>	<b>Signature</b>

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**1. Title**

**2. Purpose**

**3. Scope**

**4. Objective**

**5. Resources**

**6. Aspects & Impacts**

<b>NO</b>	<b>ASPECT (Act that might have an impact on the environment)</b>	<b>IMPACT</b>	<b>MITIGATION</b>	<b>REFERENCE DOCUMENTS</b>
1				
2				
3				
4				
5				

**7. Conclusion**

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## **Appendix F: PRE-AMBLE FOR TRANSGRESSIONS AND FINES**

The objective of the EMPr is to minimise destruction of the environment due to the project activities. It is the contractor's responsibility to ensure compliance to the EA, EMPr, environmental legislation and other environmental permits and requirements. The fines listed below will be issued to the contractor on environmental transgressions relating to the EMPr, EA, environmental legislation and other environmental permits and requirements. Such fines will be imposed in addition to remedial costs that might be required and therefore the contractor is not exempted from implementing the remediation measures where necessary. All the transgressions identified on site will be noted and both the site manager and the project manager will be informed of such transgressions. Eskom PDP project management can use their discretion to impose fines on any other transgressions and repeat incidents that are not listed below, but in their opinion could have been avoided. The list below can be used as a guide for such fines. The penalty fine will be administered per individual clients. The fines will be deducted from invoices submitted by the contractor.

### **TRANSGRESSIONS AND FINES**

<b>No</b>	<b>Transgression</b>	<b>Regulatory Control</b>	<b>(Minimum of) Fine in Rands</b>
1	Damage to no go areas such as wetlands, rivers and heritage sites as a result of construction activities or employees	National Water Act 36 of 1998 & National Heritage Resources Act 25 of 1999	R100 000
2	Open fires in undesignated areas	EMPr	R50 000
3	Inappropriate disposal of waste	National Environmental Management Waste Act 59 of 2008	R100 000
4	Illegal burning of waste	National Environmental Management Waste Act 59 of 2008 & National Environmental Management Act 107 of 1998	R100 000

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5	Pollution and/or discharge of wastewater, oil and concrete onto / into the land, surface or groundwater	National Water Act 36 of 1998 & National Environmental Management Act 107 of 1998	R100 000
6	Pollution and/or discharge of wastewater, oil and concrete onto/into the land, surface or groundwater	National Water Act 36 of 1998 & National Environmental Management Act 107 of 1998	R100 000
7	Illegal abstraction of water from a waterbody or borehole (without a permit)	National Water Act 36 of 1998	R100 000
8	Illegal mining e.g. borrow pits	Mineral and Petroleum Resources Development Act 28 of 2002	R200 000
9	Illegal river crossing (including seasonal or periodic rivers)	National Water Act 36 of 1998	R100 000
10	Altering a riverbed or river embankment without a permit	National Water Act 36 of 1998	R100 000
11	Leaving gates open or failure to lock gates	Fencing Act 31 of 1963	R50 000
12	Damage, bending, river over or cutting of landowner's fences without permission	Fencing Act 31 of 1963	R50 000
13	Damage, cutting or removal of protected and/or indigenous trees without a permit	National Forest Act 84 of 1998 / EA	R200 000
14	Killing of a landowner's animals or any other animals without permission	EA/EMPr	R50 000
15	Inadequate / no barricading	EMPr	R40 000
16	Using the veld as a toilet / failure to provide toilets at work stations	EA/EMPr	R50 000
17	Illegal harvesting of plants for medicinal / any other use	EA/EMPr	R50 000

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18	Littering	National Environmental Management Waste Act 59 of 2008 & National Environmental Management Act 107 of 1998 / EA / EMPr	R10 000
19	Not adhering to agreed access roads	EA/EMPr	R30 000
20	Failure to conduct audits as per the EA requirements	EA	R50 000
21	Any repeat legal contravention	EOHS Management Procedure 32-95	R200 000
22	Use of exotic plant species for rehabilitation	EA / Conservation of Agricultural Resources Act 43 of 1983	R100 000
23	Failure to keep record as per the EA requirements	EA	R50 000
24	Activity commencement without approved method statements	EMPr	R50 000
25	Improper storage of hazardous substances as per the EA (bundling, labelling, quantities, compatibility)	EMPr	R100 000
26	Not implementing emergency procedures for handling spills / deliberate spills	EMPr	R50 000
27	Mixing of cement on a permeable surface	EMPr	R50 000
28	Sewage spills or incorrect disposal of sewage	EMPr	R50 000
29	Fixing or washing of vehicles on undesignated and unbunded areas	EMPr	R30 000
30	Mixing general and hazardous waste	National Environmental Management Waste Act 59 of 2008	R50 000
31	Disposal of hazardous waste in a general landfill site	National Environmental Management Waste Act 59 of 2008	R100 000

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32	Disposal of waste in an unregistered landfill site	National Environmental Management Waste Act 59 of 2008	R100 000
33	Non reporting of incidents and / or poor incident management	EOHS Management Procedure 32-95	R40 000
34	Failure to provide firefighting equipment	EMPr	R30 000
35	Failure to conduct environmental induction	EMPr	R20 000
36	Contravening any other environmental related legislation	Legislation	R10 000 – R300 000

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