


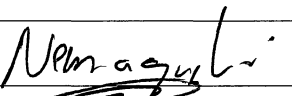
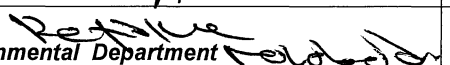
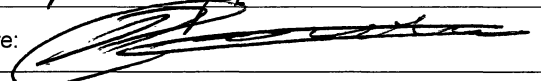
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		Document Identifier	14593	Rev	4
		Effective Date	October 2019		
		Review Date	October 2022		

PLANT AREA: Dust Handling plant			
TITLE: Duty line Basalt lining			
REF: MEA-06196	Reference Rev No:	MULTIDISCIPLINARY: No	Plant Level: 2
COMPILED BY	Name: Gavin Phelelo System Engineer	Signature:  G. P. PHELELO	Date: 13/02/2020
APPROVED	Name: Thando Mbulawa Line Manager	Signature: 	Date: 13/02/2020
APPROVED	Name: Lele Masote Group Manager	Signature: 	Date: 14/02/2020
REVIEWED	Kagiso Molokoane Chief Engineer	Signature:	Date:
REVIEWED	Name: PP Tshamane Quality Department	Signature: 	Date: 14/02/2020
ACCEPTED	Name:  Environmental Department	Signature: 	Date: 14/02/2020
ACCEPTED	Name: AIA	Signature:	Date:


NB: Do not tamper with the template.

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### GENERAL

- Data books, reviews, reports and diagrams/drawings shall be submitted to Engineering after the completion of the work. Engineering to forward the data books to Quality Department (Document Control)
- All QCP's to be submitted to Engineering and Quality for approval prior to outage/project or maintenance work commencement.


	SCOPE OF WORK DESCRIPTION / ACTIVITY	PROCEDURE, SPECIFICATION, ENG. REQUIREMENTS / DOCUMENTATION	HOLD POINTS, WITNESS, REPORTS	RESPONSIBLE PARTY
1.1	Safety	<ul style="list-style-type: none"> <li>• All work is to be done in accordance with Matla plant procedures and safety regulations. (GGR 0992).</li> <li>• Matla power station induction must be done before any work commences.</li> <li>• Permit to work must be in place before any work commences.</li> <li>• Worker's register must be completed and daily risk assessment conducted before any work commences.</li> </ul>	Eskom to witness.	Contractor
1.2	Environmental Management.	<ul style="list-style-type: none"> <li>• All activities listed in the National Environmental Act 107 of 1998, EIA Regulation 982,983,984 &amp; 985(2014), must have <b>AUTHORISATION</b> before commencement of work.</li> <li>• The contractor shall comply with all applicable legal and other requirements.</li> <li>• The polluter pays principle will be applied.</li> </ul>	Eskom to witness.	Contractor

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		<ul style="list-style-type: none"> <li>The contractor manager shall ensure compliance with Eskom Matla Environmental procedures to ensure the prevention of pollution (OMOP 4090).</li> <li>The last payment will be processed based on the status of the last housekeeping check sheet (Annexure G: OMOP 4018) of designated area. EMS file based on ISO14001 will be required.</li> </ul>		
1.3	Quality Management	<ul style="list-style-type: none"> <li>The contractor/executioner of work will be responsible for drawing up all QCP documentation and this must be approved by engineering and authorised by the Quality Department before commencing with the work.</li> <li>Contractors/executioner to adhere to QM 58 and OMOP4497 requirements</li> <li>Number of NCR issued can affect your next tendering process.</li> <li>The QCP shall be signed progressively by the Engineer/Supervisor, Eskom QC Inspector, Contractor QC Inspector and/or AIA.</li> <li>No procuring of outage items without the approval of scopes by quality</li> <li>All outage scopes creep and scopes addition should be approved by quality</li> <li>No contractor should be in the possession of scopes for execution without the scopes approved by quality</li> <li>The contractor is subjected to quality auditing at any point in time during execution of scope</li> </ul>	Hold point	Contractor
1.4	Inputs from other			

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	departments			
1.5	Commissioning reference			

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SCOPE OF WORK DESCRIPTION / ACTIVITY	PROCEDURE, SPECIFICATION, ENG. REQUIREMENTS / DOCUMENTATION	HOLD POINTS, WITNESS, REPORTS	RESPONSIBLE PARTY
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#### DETAILED SCOPE


	SCOPE OF WORK DESCRIPTION / ACTIVITY	PROCEDURE, SPECIFICATION, ENG. REQUIREMENTS / DOCUMENTATION	HOLD POINTS, WITNESS, REPORTS	RESPONSIBLE PARTY
	<b>The purpose of this scope:</b>  There has been an increased failure rate in the dust conveying lines which are affecting the safety and health of personnel and productivity of the plant. The purpose of the scope is to line the dust duty lines with a hard material in order minimize erosion wear.			
2.1	Manufacture, supply and install new duty lines. The straight sections have to be basalt lined and the bends to be tiled.  The original lines have an internal diameter of 300mm and 250mm. The line sizes will increase from internal diameter of <b>250 mm to 300 mm</b> and from <b>300mm to 350mm</b> , the size increase in the pipes is to compensate the area lost due to the lining. All pipes to have a 10mm wall thickness. Ensure the pipes are concentric with the basalt and the tiles.  Please use Eskom drawings as reference:	<ul style="list-style-type: none"> <li>• <b>1 meter mild steel Bends x 60:</b> <ul style="list-style-type: none"> <li>▪ 350 ID 1 meter long radius bend sections x 30 (<b>350 ID x 1000mm R x 90°</b>)</li> <li>▪ 300 ID 1 meter long radius bend sections x 30 (<b>350 ID x</b></li> </ul> </li> </ul>	Hold/Witness	Contractor/Engineer

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	<ul style="list-style-type: none"> <li>• 0.47/44867</li> <li>• 0.47/44866</li> <li>• 0.47/44869</li> <li>• 0.47/44870</li> <li>• 0.47/44871</li> <li>• 0.47/44872</li> </ul>	<p><b>1000mm R x 90°)</b></p> <ul style="list-style-type: none"> <li>▪ SABS 1123 class 16, flanges x60</li> <li>▪ SABS 1123 class 16, flanges x60</li> <li>▪ All bends to be lined with ceramic tiles with 15mm thick tiles</li> <li>• <b>350 ID 9m mild steel sections x 260</b></li> <li>▪ SABS 1123 class 16, flanges x520</li> <li>▪ All sections to be 15mm basalt lined.</li> <li>• <b>300 ID 9m mild steel sections x 167</b></li> <li>➤ SABS 1123 class 16,</li> </ul>		
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		flanges x 334 ➤ All sections to be 15mm basalt lined <b>Max operating pressure: 500 KPa</b>  <b>Total Pipe Length:</b>  U1 to Bulk Silos:780m U2 to Bulk Silos:710m Standby Line 1: 780m U3 to Bulk Silos:610m U4 to Bulk Silos:530 Standby 2:610m U5 to Bulk Silos:430m U6 to Bulk Silos:380m		
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		Stand by 3: 430m  For any welding  Supplier must submit the following documents with the reply RFQ: <ul style="list-style-type: none"> <li>Welder qualification (BS EN 9606)</li> <li>WPS and PQR</li> </ul> Welding to comply with:  <b>240-1106628253-Eskom standards for welding requirements</b>		
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#### BILL OF MATERIAL

	Full description Material/Spares/Equipment	Specifications of Material/Spares/Equipment	Stock No	Part Number	Required Quantity
1	350 ID 1 meter bends				30
2	300 ID 1 meter bends				30
3	SABS 1123 class 16, 350 ID flanges				550
4	SABS 1123 class 16, 300NB flanges x60				394
5	15 mm ceramic tiles				For 60m pipe
6	350NB 9m mild steel sections				260
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7	SABS 1123 class 16, 350NB flanges				60
8	300NB 9m mild steel sections				167
9	15mm Basalt lining				For 1505m 300NB pipe and 2304m of 350NB pipe

SCOPE COMPILATION REFERENCES			
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SOURCE & Ref No.	Yes	No	N/A	Comments
Previous outage service reports				
Return to service data packages				
Maintenance Strategy with Rev number				
SAP defects (attach list as appendix)				
GHRMS (STEP) reports (Generation Heat Rate Management System)				
Online Condition Monitoring				
Pre-outage performance test results				
Post outage performance test results				
GPSS/ Plant Performance data on UCLF incurred				
OMS / IIRMS recommendations (Audits Reports)				
Risk controls (IRM system)				
Previous audits and reviews (e.g. ERAP)				
Engineering Change Requests (Projects)				
LOPP strategy reports				
URS				
Philosophy (Outage)				
Condition Monitoring Report				

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VA/PHD Viewer trends				
Corrective Actions				
CARAB reports				
Statutory Requirements				
Grid code requirements				
Waivers and Exemptions				
Calibration requirements				
Previous Outage SOW variations				
Post Mortems Actions from previous outages				
Pre-Outage plant walks				
Risk based inspection (RBI) report				
Simulation, TOIs, OON, SI				

COMMENTS


Compiled by: .....

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