

PROJECT AMENDMENTS AND APPROVALS:

February 2023

The authorised Sediba Solar Power Plant,
near Parys, Free State Province



ENVIRONAMICS

PROJECT DETAIL

DFFE Reference No	:	14/12/16/3/3/2/2086
Project Title	:	The development of the authorised Sediba Solar Power Plant, near Parys, Free State Province
Authors	:	Lisa de Lange
Client	:	Sediba Solar Power Plant (RF) (Pty) Ltd
Report	:	Project Amendments and Approvals of the authorised Sediba Solar Power Plant
Report status	:	Release of the report for a 30-day review and comment period to registered I&APs from Tuesday 14 February to Thursday 16 March 2023
Submission date	:	14 February 2023

When used as a reference this report should be cited as: Environamics (2023). Project Amendments and Approvals of the authorised Sediba Solar Power Plant, near Parys, Free State Province

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TABLE OF CONTENTS

PROJECT DETAIL	2
TABLE OF CONTENTS	3
APPENDICES	4
1 INTRODUCTION	5
2 AMENDMENTS AND APPROVALS APPLIED FOR	6
2.1 DETAILS OF THE REQUESTED AMENDMENTS AND APPROVALS	6
3 PUBLIC PARTICIPATION	12
3.1 PUBLIC PARTICIPATION TASKS	12
4 CONCLUSION	13

APPENDICES

Appendix A: EA Split Matrix

Appendix B: Amended PV Facility Layout Map

Appendix C: Sediba Solar Power Plant Grid Connection Infrastructure Layout Map

Appendix D: Detailed Engineering Layout Map

Appendix E: Environmental Management Programme – Solar Facility

Appendix E1: Solar Facility

Appendix E2: Generic EMPr – IPP Substation

Appendix F: Environmental Management Programme – Grid Connection

Appendix F1: Generic EMPr – Power Line

Appendix F2: Generic EMPr – Eskom Switching Station

Appendix G: Public Participation

Appendix G1: List of I&APs

Appendix G2: Proof of Notification and Correspondence

Appendix G3: Comments received – to be included in the final report

Appendix G4: Comments and Responses Report – to be included in the final report

Appendix H: Environmental Authorisation

1 INTRODUCTION

This document provides the details of the amendments and approvals being sought from the Department of Forestry, Fisheries and the Environment (DFFE) for the authorised Sediba Solar Power Plant (DFFE Ref. 14/12/16/3/3/2/2086). Sediba Solar Power Plant (RF) (Pty) Ltd received Environmental Authorisation (EA) from the DFFE on 25 April 2022 (refer to Appendix G).

This report is in line with the requirements indicated by the DFFE for the proposed amendments and approvals which have been communicated to the EAP.

This report, and all supporting documentation has been made available for a 30-day review and comment period to the DFFE as well as all registered interested and affected parties from Tuesday 14 February 2023 to Thursday 16 March 2023. This is as per the requirements communicated from the DFFE to Environamics.

The aim of the review and comment period is to provide the Department and I&APs with an opportunity to review and comment on the amended layout(s) and amended Environment Management Programmes (EMPrs) as per the requirements of condition 12, condition 15 and condition 16 of the EA. Following the 30-day review and comment period, all comments will be considered and the layouts and EMPrs will be finalised accordingly. The finalised layouts and EMPrs will subsequently be submitted to the DFFE for approval as per the requirements of the EA.

Environamics has been appointed by the Holder for the EA as the independent EAP to conduct the Amendment and Approval Process and prepare all required documentation. All correspondence to the EAP can be directed to:

Contact person: Lisa de Lange
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2 AMENDMENTS AND APPROVALS APPLIED FOR

This section aims to provide a description of the amendments and approvals being applied for. It must be noted that the amendments proposed fall within the ambit of a Part 1 amendment process as per the EIA Regulations, 2014, as amended and as was confirmed during the pre-application meeting held with the DFFE on 18 October 2022. The notes of the meeting were submitted to the Department for approval on 30 November 2022.

2.1 DETAILS OF THE REQUESTED AMENDMENTS AND APPROVALS

The following amendments and approvals are requested by the Applicant, Sediba Solar Power Plant (RF) (Pty) Ltd, in order to reach financial close and optimize the facility layout for the commencement of construction. This is considered to be a proactive approach to ensure the development is ready to be constructed in a short timeframe following the next bidding round of the Department of Mineral Resources and Energy's Renewable Energy Independent Power Producer Procurement (REIPPP) Programme.

Motivation for each amendment is also provided below.

2.1.1 AMENDMENT 1: SPLIT OF THE EA

The EA currently approves the PV facility and associated infrastructure, including grid connection infrastructure. The Applicant wishes to split the EA into two separate authorisations, namely:

1. Solar Power Plant and associated infrastructure, including the BESS and the on-site facility substation.
2. Overhead Power Line and associated infrastructure, including the portion of the substation that will belong to Eskom.

Separate EMPs have been compiled to provide the relevant and appropriate mitigation measures for each of the respective EAs and the associated impacts. The EMPs include the following as per the EA splits requested:

1. Solar Power Plant and associated infrastructure, including the BESS and the on-site facility substation – EMP for the PV Facility and Generic EMP for the substation infrastructure (Appendix D).
2. Overhead Power Line and associated infrastructure, including the portion of the substation that will belong to Eskom – Generic EMP for the overhead power line infrastructure and Generic EMP for the substation infrastructure (Appendix E).

The layout maps associated with each split EA is also included in the respective EMPs and this report (Appendix B, C and D). A split matrix is also submitted with this request for Amendment of the EA to indicate which conditions and what details are relevant to each of the individual split EAs. Refer to Appendix A.

It is further requested that the layout maps and EMPs be approved as part of this Amendment process (as per conditions 12 and 15 of the EA). Refer to Amendments 6 and 7 requested below.

Further to the above, the DFFE has requested the coordinates of the locations of the on-site facility substation (Independent Power Producer (IPP) Substation, as well as the coordinates of the portion of the substation that will belong to Eskom. These coordinates are provided below:

Substations		Latitude	Longitude
IPP substation	1	26°56'27.20" S	27°28'16.01" E
	2	26°56'26.40" S	27°28'17.95" E
	3	26°56'28.69" S	27°28'19.06" E
	4	26°56'29.47" S	27°28'17.18" E
Eskom substation	1	26°56'26.40" S	27°28'17.95" E
	2	26°56'25.70" S	27°28'19.60" E
	3	26°56'27.97" S	27°28'20.77" E
	4	26°56'28.69" S	27°28'19.06" E

2.1.2 AMENDMENT 2: PROPOSED ADDITIONAL ACCESS POINTS

The approved PV facility is bisected by the S971 Road. The approved access point only provides access to the northern section of the eastern portion of the PV facility. The Applicant proposes to create two additional points to access the western portion of the PV facility, as well as the southern section of the eastern portion of the facility. The proposed additional access points will be located at the following coordinates:

Proposed access	Latitude	Longitude
2 (western portion)	26°57'1.65" S	27°27'51.40" E
3 (Eastern portion)	26°57'2.66" S	27°27'53.11" E

The proposed additional access points will not trigger a new Listed Activity, since the access point will not exceed a width of 4 meters. The access points are providing additional points of access into the facility to optimise the facility and construction and operation phase activities thereof. Refer to Appendix B.

2.1.3 AMENDMENT 3: CORRECTION OF THE SIZES OF THE BESS AND CONSTRUCTION LAYDOWN AS AUTHORISED

The sizes indicated in the EA in the table providing the technical details of the proposed facility, page 7, were not accurately provided by the Applicant at the time of the EIA process and is therefore not reflecting the sizes of the infrastructure assessed in the layout plan during the EIA process. It is therefore requested to amend the sizes for completeness of the details. Refer to the details below for the amendment request:

Project Component	Amended from (EA):	To (correction)
Area occupied by the BESS	4 000m ² / 0.4ha	40 000m ² / 4ha
Area occupied by the construction laydown area	~2000m ² / 0.2ha	~17 300m ² / 1.73ha – as per the confirmed information associated with the final layout

However, when considering the final layout proposed for the facility, the optimisation has resulted in a reduction of the area required for the construction laydown areas (refer to amendment 5 below as well), which is confirmed to be a total of 1.73ha / 17 300m², which is therefore a reduction of the extent of the total footprint associated with the construction laydown areas. It must be noted that two laydown areas will form part of the layout (refer to Amendment 5 below), one laydown area will have an extent of 0.98ha and the other 0.75ha. Refer to Appendix B.

2.1.4 AMENDMENT 4: CORRECTION OF THE BESS CAPACITY

The BESS capacity was incorrectly stated in the final EIA report, the Holder of the EA therefore requests an amendment to correct the incorrect information. The amendment request is as follows:

Table including the technical details of the proposed facility, Page 7 of the EA (Appendix G):

From:

Battery storage facility	Capacity: 500MW
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To:

Battery storage facility	Capacity: 500MWh
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2.1.5 AMENDMENT 5: RELOCATION OF LAYDOWN, ADDITIONAL LAYDOWN AREA AND RELOCATION OF THE O&M BUILDING

The laydown area assessed as part of the layout in the EIA is proposed to be relocated to the south of the eastern portion of the PV facility. The area proposed for relocation falls within the development footprint authorised for the proposed development. The new location of the laydown area is indicated in the final layout submitted for approval as part of this amendment process. Refer to Appendix B for the Layout Map.

The Applicant proposes to establish a second laydown area (0.75ha) on the western portion of the PV facility. A second laydown area is preferred to (1) reduce traffic across the R723 Regional Road and (2) reduce distances travelled onsite thereby reducing dust generation. The second laydown area would be located in an area that was assessed by all specialists and no environmental sensitivities are located within the area. Furthermore, the establishment of a second laydown area will not trigger a new Listed Activity as the location of the proposed laydown area is within the assessed and authorised development footprint of 245ha and nor will it result in a change to the authorised project footprint shape or size. The location of the second laydown area is indicated in the final layout submitted for approval as part of this amendment process. Refer to Appendix B for the Layout Map.

The Applicant furthermore requests the relocation of the O&M building from the northern section of the eastern portion of the PV facility to the southern section of the eastern portion of the facility. The need for the relocation is to reduce building from the R723 Regional Road and reduce the lighting impact of the building on the travellers utilising the Regional Road at night. The new location of the O&M Building is indicated in the final layout submitted for approval as part of this amendment process. Refer to Appendix B for the Layout Map,

2.1.6 AMENDMENT 6: APPROVAL OF THE FINAL FACILITY LAYOUT

The EA has not approved the site layout plan of the Sediba Solar Power Plant as assessed within the EIA process. The Holder of the EA is therefore requesting that the final site layout be approved. This is as per Condition 12 of the EA which reads, as follows:

Condition 12:

“A final site layout plan for the PV facility, as determined by the detailed engineering phase and micro-siting, and all mitigation measures as dictated by the final site layout plan, must be submitted to the Department for approval prior to construction. A copy of the final site layout map must be made available for comments to registered Interested and Affected Parties and the holder of the environmental authorisation must consider such comments. Once amended, the final development layout plan must be submitted to the Department for written approval, prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g., roads. The layout map must indicate the following:

- 12.1 The position of the Solar PV panels;*
- 12.2 All associated infrastructure;*
- 12.3 The finalised access route;*

- 12.4 *The on-site and/or switching substation, indicating the Independent Power Producer’s section and Eskom’s section;*
- 12.5 *The specific position of the powerline route, with pylon structures and foundation footprints;*
- 12.6 *All sensitive features; and*
- 12.7 *All “no-go” and buffer areas.”*

As the Holder of the EA requests the splitting of the EA (as per Amendment 1), it is requested that the two respective site layout plans be approved, as indicated in Appendix B, Appendix C and Appendix D. The two layout maps are as follows:

1. Solar Power Plant and associated infrastructure, including the BESS and the on-site facility substation.
2. Overhead Power Line and associated infrastructure, including the portion of the substation that will belong to Eskom.

This is as per the EA splits requested in Amendment 1.

Furthermore, the layout maps have been distributed to the registered I&APs for review and comment as part of a 30-day review and comment period from 14 February 2023 to 16 March 2023 of this report. All comments received from the I&APs will be considered by the Applicant and the Final Layout Map updated, as relevant. The comments received on the updated Final Layout Map will be submitted to the DFFE for decision-making shortly after the end of the 30-day review and comment period. The final layout map will then be submitted to the DFFE for decision-making.

2.1.7 AMENDMENT 7: APPROVAL OF THE PV FACILITY EMPR

The EA has not approved the EMPr of the Sediba Solar Power Plant as included in the EIA process. The Holder of the EA is therefore requesting that the EMPr be approved. This is as per Conditions 15 and 16 of the EA.

The EMPr has been updated to include all requirements listed under condition 16 of the EA. Refer to Appendix D1.

The Holder of the EA has undertaken specific studies and management plans following the receipt of the EA which includes specific mitigation / management measures that need to be included as part of this EMPr. These include:

- Stormwater Management Plan
- Geotechnical Investigation Report
- Groundwater Availability Investigation
- Botanical Walk-through/Walkdown Report
- Plant Protection and Habitat Rehabilitation Plan
- Alien Invasive Management Plan and Eradication Programme

This EMPr has been updated to include these measures accordingly. Refer to Appendix D1.

The mitigation measures that were recommended for the Sediba Solar Power Project site as part of the Avifauna Impact Assessment undertaken during the Environmental Impact Assessment process has been updated by the independent specialist to ensure that the measures recommended are feasible and practical for implementation by the Holder of the EA. These updated measures are reflected in this amended EMPr.

Furthermore, the EMPr has been updated to include the specific conditions of the EA, where relevant.

The update EMPr has been distributed to the registered I&APs for review and comment as part of a 30-day review and comment period from 14 February 2023 to 16 March 2023 of this report. All comments received from the I&APs will be considered and the EMPr updated and finalised, as relevant. The comments received on the EMPr will be submitted to the DFFE for decision-making shortly after the end of the 30-day review and comment period.

3 PUBLIC PARTICIPATION

3.1 PUBLIC PARTICIPATION TASKS

Public Participation tasks need to be undertaken specifically for the approvals of the layout maps and EMPrs. This is as per the requirements of conditions 12 and 15. Which states that the facility layout maps (Appendix B and C) and Solar Facility EMPr (Appendix E1) must be made available for comments to registered Interested and Affected Parties (I&APs) and the holder of the authorisation must consider such comments for the finalisation of both the layout maps and EMPr. Furthermore, the layout maps and EMPr must then be submitted to the DFFE for written approval prior to the commencement of the activity.

Considering the above the following public participation tasks have been undertaken in this regard:

- All registered I&APs have been notified of the availability of this report, and supporting document for a 30-day review and comment period. The notification was distributed on 14 February 2023. The notification further confirmed that the 30-day review and comment period will be from Tuesday 14 February 2023 to Thursday 16 March 2023. The list of all registered I&APs is included as Appendix G1. Proof of notification of the I&APs is included as Appendix G2.
- This Report, inclusive of the Application for Amendment of the EA has been submitted to the DFFE for a 30-day review and comment period on 14 February 2023. The DFFE has been informed that the 30-day review and comment period will be from Tuesday 14 February 2023 to Thursday 16 March 2023.

Following the 30-day review and comment period, all comments received from registered I&APs and the DFFE will be considered by the applicant and the amended layout maps and EMPr will be finalised accordingly. This finalised version of the documents will then be submitted to the DFFE for decision-making and approval. It will be in the form of a final report, such as this one.

All comments received during the 30-day review and period will be included as Appendix G3 of the final Report. A comments and responses report will also be submitted as part of the final report as Appendix G4.

4 CONCLUSION

No new / change in negative impacts are expected with the approval of the requested amendments, as the amendment are fully located within the footprint assessed for the development of the facility. Only the impacts and the significance thereof assessed during the EIA process will be relevant (with no change in impact).

Should the amendments not be granted, the project would not be viable from a technical perspective and would not be able to reach financial close. This will result in a significant socio-economic loss to the surrounding area as the positive impacts associated with the development of the Sediba Solar Power Plant will not be realised.

Should the amendments be granted, an opportunity for the realisation of positive impacts associated with the various components of the solar power plant, as assessed within the EIA process, will be available.

APPENDICES

Appendix A: EA Split Matrix

Appendix B: Amended PV Facility Layout Map

Appendix C: Sediba Solar Power Plant Grid Connection Infrastructure Layout Map

Appendix D: Detailed Engineering Layout Map

Appendix E: Environmental Management Programme – Solar Facility

E1: Solar Facility

E2: Generic EMPr – IPP Substation

Appendix F: Environmental Management Programme – Grid Connection

F1: Generic EMPr – Power Line

F2: Generic EMPr – Eskom Switching Station

Appendix G: Public Participation

G1: List of I&APs

**G2: Proof of Notification and
Correspondence**

G3: Comments Received – N/A

G4: Comments and Responses Report

Appendix H: Environmental Authorisation