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ArcelorMittal Carbon Separation Plant (CSP): External Environmental Performance Assessment

Audit Report

Final

18 June 2019

ArcelorMittal South Africa Limited

GCS Project Number: - 19-0125

Client Reference: PO 4520628378

GDACE Reference: GAUT 002/05-06/0510



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DOCUMENT ISSUE STATUS

Report Issue	<u>Final</u>		
GCS Reference Number	19-0125		
Client Reference	PO 4520628378		
Title	ArcelorMittal - External Environmental Performance Assessment - Audit Report		
	Name	Signature	Date
Author	Elizabeth Mosepele		18 June 2019
Document Reviewer	Fatima Matlou		18 June 2019

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EXECUTIVE SUMMARY

ArcelorMittal South Africa (Vanderbijlpark Works) was established in 1942 and commenced production in 1952. ArcelorMittal South Africa Vanderbijlpark Works (Vanderbijlpark Works) is one of the largest steel producers in South Africa. The Vanderbijlpark Works manufacture steel products by charging raw materials such as iron ore, coke and dolomite into blast furnaces to produce liquid iron. The liquid iron is refined in basic oxygen furnaces to produce liquid steel. The liquid steel is further processed into various rolled and coated steel products.

A Record of Decision (RoD) was issued to ArcelorMittal for the installation and operation of a Carbon Separation Plant (CSP) (RoD number: GAUT 002/05-06/0510) in terms of Regulations 1182 and 1183 and promulgated under Section 22 of the Environmental Conservation Act, 1989 (Act No. 73 of 1989) (ECA). The RoD was issued by the Gauteng Department of Agriculture, Conservation and Environmental (GDACE) in 2006.

It should be noted that the CSP is currently not in operation as the market for the carbon rich material no longer exists. The facility is investigating the possibility of selling the dolochar waste without beneficiation as there is a potential market for this material. In the event that the CSP will no longer be required, ArcelorMittal should investigate the decommissioning or closure of the plant within the legal framework.

GCS Water and Environment (Pty) Ltd. (GCS) was contracted by ArcelorMittal to conduct an independent Environmental Performance Assessment (EPA Audit) for the Vanderbijlpark Works. The EPA Audit was carried out against all conditions included in the RoD.

Accordingly, the following activities were undertaken as part of the EPA Audit:

- Assessment and comparison of the current site activities with those described in the approved RoD;
- Comparison of environmental mitigation measures implemented on site to those required and committed to in terms of the approved RoD in order to assess whether these comply with the management objectives committed to in the RoD;
- Assessment of monitoring requirements to current monitoring practices;
- Assessment of relevant documentation pertaining to various compliance aspects; and
- Identification of current activities and facilities at the Vanderbijlpark Works, which are not specifically included in the approved RoD.

The audit findings, detailed in the report, include practical recommendations whereby the various non-compliance issues can be corrected. All findings were ranked according to the following criteria:

- Compliant;
- Minor non-compliance;
- Moderate non-compliance; and
- Major non-compliance.

Currently the overall compliance with the Record of Decision (RoD) (GAUT 002/05-06/0510) is noteworthy. Overall there was zero (0) incident of minor non-compliance, zero (0) incidents of moderate non-compliance, and zero (0) incidents of major non-compliance observed for the audit period. There were no incidents of non-compliances observed. This is a verification that ArcelorMittal takes their compliance to the RoD seriously and the Auditor is satisfied that the conditions of the RoD are being complied with in full.

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1 INTRODUCTION

ArcelorMittal South Africa (ArcelorMittal) Vanderbijlpark Works was established in 1942 and commenced production in 1952. ArcelorMittal South Africa Vanderbijlpark Works is one of the largest steel producers in South Africa. The Vanderbijlpark Works manufacture steel products by charging raw materials such as iron ore, coke and dolomite into blast furnaces to produce liquid iron. The liquid iron is refined in basic oxygen furnaces to produce liquid steel. The liquid steel is further processed into various rolled and coated steel products.

A Record of Decision (RoD) was issued to ArcelorMittal for the installation and operation of a carbon separation plant (CSP) (RoD number: GAUT 002/05-06/0510) in terms of Regulations 1182 and 1183 and promulgated under Section 22 of the Environmental Conservation Act, 1989 (Act No. 73 of 1989) (ECA). The RoD was issued by the Gauteng Department of Agriculture, Conservation and Environmental (GDACE) in 2006.

The following conditions are requirements of the RoD in terms of the ECA as issued by the GDACE:

Condition 3.4 C of the RoD: An annual Environmental Performance Audit conducted by an independent, accredited auditor must be submitted to the Department on request, the first audit being due 12 (twelve) months after commissioning of the CSP project, and every 12 (twelve) months thereafter.

The CSP is currently not in operation as the market for the carbon rich material no longer exists. The facility is investigating the possibility of selling the dolochar waste without beneficiation as there is a potential market for this material. In the event that the CSP will no longer be required, ArcelorMittal should investigate the decommissioning or closure of the plant within the legal framework.

GCS Water and Environment (Pty) Ltd. (GCS) was contracted by ArcelorMittal to conduct an independent Environmental Performance Assessment (EPA) Audit for the Vanderbijlpark Works. The EPA audit was carried out against all conditions included in the RoD and the audit assessment was undertaken by Ms. Fatima Matlou who has experience in mining and industrial projects; and Ms Elizabeth Mosepele an Environmental intern, both from GCS.

A one (1) day site visit was undertaken at the Vanderbijlpark Works site on the 11 April 2019. The site visit was initiated with a project kick-off meeting during which GCS met with Ms. Ilze Broekman, ArcelorMittal's Environmental Control Officer (ECO) for this project. Following the kick-off meeting, a comprehensive review of the RoD documentation and associated checklists was undertaken. This assessment monitored compliance in terms of

document control, systems and procedures. Following the checklist audit and documentation review.

Accordingly, the following activities were undertaken as part of the EPA Audit:

- Assessment and comparison of the current site activities with those described in the approved RoD;
- Comparison of environmental mitigation measures implemented on site to those required and committed to in terms of the approved RoD in order to assess whether these comply with the management objectives committed to in the RoD;
- Assessment of monitoring requirements to current monitoring practices;
- Assessment of relevant documentation pertaining to various compliance aspects; and
- Identification of current activities and facilities at the Vanderbijlpark Works, which are not specifically included in the approved RoD.

2 AUDIT PROCESS

The following steps formed the basis of the EPA Audit.

2.1 Step 1: What is the objective of the audit?

The objectives of any audit should be clearly defined and settled before either an internal or external audit begins. The setting of objectives is important, as it is against these objectives that ArcelorMittal will be reviewed and expected to improve.

The following objectives formed the basis for the EPA Audit:

- Ensuring legal compliance in terms of the approved RoD;
- Checking that the environmental management tools to achieve compliance are used correctly and efficiently;
- To check whether the environmental management tools are effectively fulfilling their intended purpose of environmental compliance;
- Ensuring environmental performance on a continuous basis, i.e. throughout the life cycle of the Vanderbijlpark Works site;
- Reducing environmental liability;
- To facilitate the transference of information or best practice between operating units;
- To increase environmental awareness among the employees; and
- To track the environmental accountability of managers.

2.2 Step 2: Scope of the audit

The conditions of the RoD stipulate that regular performance assessments need to be undertaken to ensure compliance with the prescribed conditions as contained in the said documents. Furthermore, Condition 3.4 C of the RoD: An annual Environmental Performance Audit conducted by an independent, accredited auditor must be submitted to the Department on request, the first audit being due 12 (twelve) months after commissioning of the CSP project, and every 12 (twelve) months thereafter.

This EPA Audit is taken to mean a regular, systematic, documented verification of whether ArcelorMittal is in compliance with the conditions of the approved RoD; the provisions of the ECA and the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), which superseded the ECA; and whether environmental performance objectives and targets are being met.

2.3 Steps 3: Information required to conduct the audit

Table 2.1 sets out the procedures that were used to obtain the audit information.

Table 2.1: Process to obtain audit information

ACTION	DESCRIPTION
Inspection	Inspection consists of examining records and documents. Inspection of records and documents provides audit evidence of varying degrees of reliability depending on their nature and source and the effectiveness of internal controls over their processing.
Observation	Observation consists of on-site observation of the activities being conducted on site.
Enquiry	Enquiry consists of seeking information of knowledgeable persons inside the organisation.
Confirmation	Confirmation consists of making enquiries to corroborate information contained in the RoD.
Computation	Computation consists of checking the accuracy of source documents and the site's records or performing independent checks of information relating to environmental aspects and impacts.

2.4 Steps 4: Conducting the audit

The audit consisted of comparing the information gathered during on-site interviews, from reports as well as assessing on-site activities with the conditions of the RoD. A checklist was developed based on the RoD conditions and used as an auditing tool to establish the audit results.

2.5 Steps 5: Evaluating the audit results

The results of the audit are presented and the auditor assesses the final compliance in relation to the realistic representation of on-site activities; taking into account South African Environmental Legislation. Through such an assessment, the auditor should determine whether the final compliance is a true representation of on-site activities and a final recommendation should be made regarding actual compliance.

2.6 Step 6: Presenting the audit results

The findings of the Audit are included in **Table 5.1** of this Report. The audit findings also include practical recommendations whereby the various non-compliance issues can be corrected.

All findings were ranked according to the criteria indicated in **Table 2.2**. The colour coding assigned to the rankings is used to visually indicate areas of compliance, minor non-compliance, moderate non-compliance, and major non-compliance. Furthermore, to indicate which conditions are not applicable to the on-site activities and which are repeat conditions that have already been scored. Each colour coding has a value (score) attached to it.

Table 2.2: Ranking criteria and colour coding scores.

RANKING	SCORE
Compliant	2
Minor non-compliance	1
Noted/Not Applicable	0
Repeat Condition	-
Moderate non-compliance	-1
Major non-compliance	-2

All findings were ranked according to the following criteria:

Noted/Not-Applicable:

- The specific condition is not relevant to the current on-site activities.

Repeat Condition:

- The specific condition is a repeat of a previous condition.

Compliant:

- ArcelorMittal complies with the conditions as stated in the RoD.

Non-compliance:

- **Minor Non-compliance:**
 - Isolated observations demonstrating that full compliance to the environmental requirements on site have not been, or will not be, fully achieved.

- **Moderate Non-compliance:**
 - There is a substantial failure to meet the environmental requirements for the project, there is a possibility of substantial environmental degradation and/or pollution, and/or objective evidence was observed raising doubt as to the integrity of data or records inspected.
- **Major Non-compliance:**
 - There is a critical failure against legal requirements or management response that presents an immediate or significant risk that could result in prosecution and/or adverse legal findings due to failure to meet regulatory requirements; result in immediate injury or serious injury; result in prolonged business outage; and/or could result in serious damage to the project's reputation.

It must be noted that duplicate conditions are not scored due to the fact that this will negatively influence the scoring results. Duplicate conditions are marked as a Repeat Condition.

2.7 Step 7: Decision-making based on audit results

Decision-making, based on the audit results, must have the following objectives; to improve the present situation and to institute fair and reasonable corrective action. ArcelorMittal should make decisions based on the significance of the problem or non-compliance and the resources required to improve the situation.

2.8 Step 8: Instituting corrective action

It is recommended that an environmental action plan be implemented to address the Audit recommendations. The plan may include:

- Goals;
- Strategies;
- Performance indicators;
- Responsibilities; and
- A timetable for achievement.

An EPA audit is an effective management tool on condition that the recommendations, as identified in this Audit, are considered and implemented. The audit provides a basis for recommending actions to correct any deficiencies and to address any areas of environmental non-compliance recorded as part of the audit findings.

3 DETAILS OF THE AUDITOR

GCS, appointed by ArcelorMittal to conduct an external EPA audit, has more than 30 years of experience and expertise in undertaking and compiling compliance audits.

3.1 Project Team

The EPA Audit was undertaken by the GCS team presented in **Table 3.1**.

Table 3.1: GCS Team

NAME	DESIGNATION	RESPONSIBILITY
Elizabeth Mosepele <ul style="list-style-type: none"> • BSc Honours Geography and Environmental Studies • SACNASP (Candi.Nat.Sci.) 	Environmental Intern	<ul style="list-style-type: none"> • Site visits • Compilation of Audit Report
Fatima Matlou <ul style="list-style-type: none"> • National Diploma Environmental Management • ELA (Reg. No. 2017/235/GP) 	Senior Environmental Consultant	<ul style="list-style-type: none"> • Overall Legal Compliance • Site visits • Liaison with Client and Project Management • Environmental Legal Assessment • Compilation of Audit Report

3.2 Assumptions and Limitations

The findings, results, observations, conclusions and recommendations given in this audit are based on the Auditor's best legal and professional knowledge as well as available information.

Although GCS exercises due care and diligence in rendering services and preparing documents, GCS accepts no liability, and the client by receiving this document, indemnifies GCS and its directors, managers, agents and employees against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with services rendered, directly or indirectly by GCS and by the use of the information contained in this document.

This audit report must not be altered or added to without the prior written consent of the auditor. This also refers to electronic copies of this Audit which are supplied for the purposes of inclusion as part of other reports, including main reports. Similarly, any recommendations, statements or conclusions drawn from or based on this audit must make reference to this EPA Audit. If these form part of a main audit relating to this investigation or report, this audit must be included in its entirety as an annexure or separate section to the main audit.

Refer to **Appendix A** for the Declaration of Independence of the Auditor.

4 AUDIT SCORING RESULTS: 2019 ROD EPA AUDIT

Figure 4-1 presents the percentage compliance of ArcelorMittal for the 2019 external EPA audit for the CSP in tabular and graphic format.

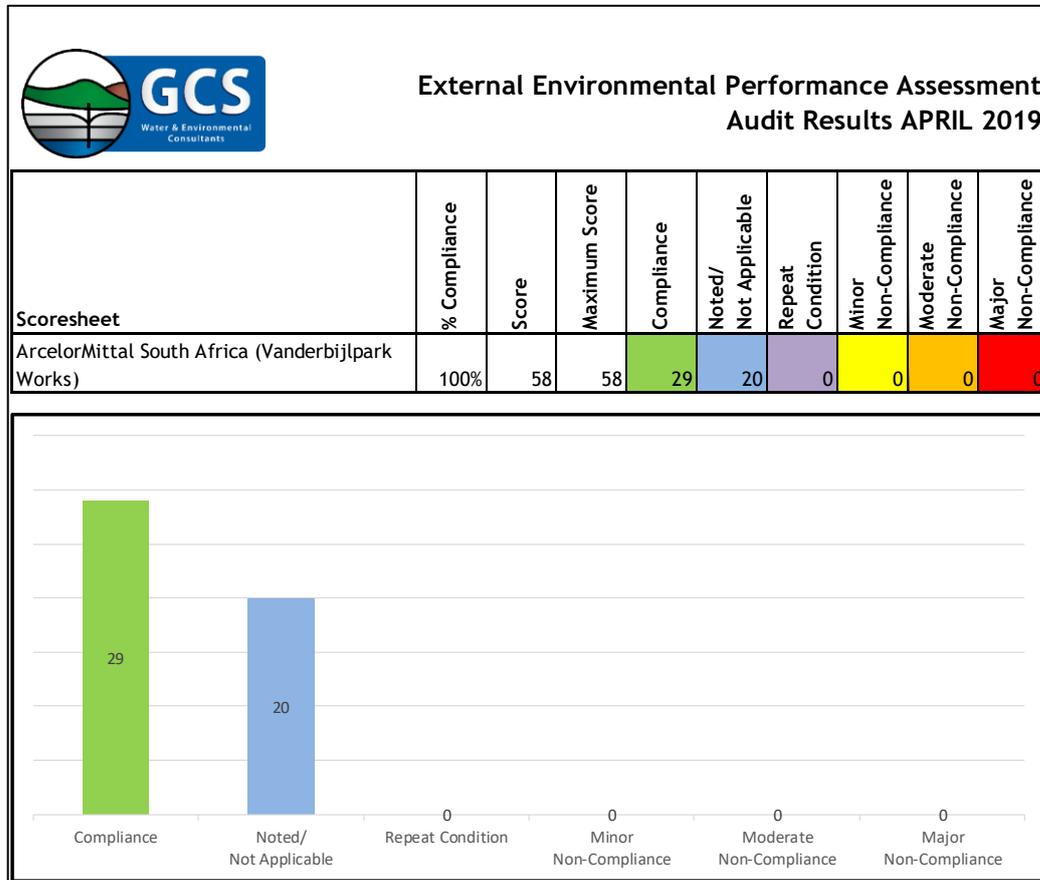


Figure 4-1: 2019 External EPA Audit Results for the CSP Project.

The graph within the table shows the number of non-compliances observed as well as the number of conditions repeated, noted or not applicable. It can be seen from the graph that ArcelorMittal is compliant with the majority of the RoD conditions. Most of the conditions were observed to be not applicable or noted due to the fact that various changes were made regarding the facility construction and operation, which have been approved by GDARD. During the previous audit it was reported that the last outstanding items to be constructed is towards improving the works water balance and does not influence the plant’s operability. This finding is still valid.

5 AUDIT FINDINGS - 2019 ROD EPA AUDIT

Table 5.1 overleaf represents the conditions, observations and recommendations, found at the ArcelorMittal CSP, April 2019 audit.

Table 5.1: Scoring Results of the EPA Audit in respect of conditions of the CSP RoD (audit undertaken in April 2019).

DATE:	11/04/2019		SITE:	ArcelorMittal South Africa (Vanderbijlpark Works) CSP	
No	Conditions	Status	Score	Observations	Recommendations
3.1	Description and extent of the activity				
	The authorisation applies in respect of the construction and operation of the Carbon Separation Plant using Winnowing technology (air separation mechanism) within the existing Magnetic Separation plant and/or building at ArcelorMittal South Africa (Vanderbijlpark Works), as part of the project to change management of dolochar disposal to reuse. The project falls within the ambit of sub-regulations 1 (c) (ii) of GN R, 1182 (as amended) promulgated under section 21 of the Act. The extent of the project and process is summarised as follows:	Noted/Not Applicable	0	This condition is noted and subsequent to the granting of the authorisation the authorised activities have not changed.	ArcelorMittal should take note that if any of the activities change, the Department must be dually notified.
(a)	ArcelorMittal South Africa (Vanderbijlpark Works) proposed carbon separation process entails the utilisation of the currently dumped by-product called dolochar.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
(b)	Dolochar consists of two size fractions i.e. +1mm and -1mm and contains carbon rich material i.e. -Hmm fraction and it is proposed that it will replace virgin material (fine coal) at Electric Arc Furnaces thus reducing dumping of +1mm dolochar by ca 36% (in mass).	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
c)	The proposed carbon separation process will use Winnowers (air separation mechanism) and it is a wholly dry process, and as a result, no effluent will be generated throughout the whole process.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
d)	The carbon separation will comprise of the following process: 1) Screening - the winnowing process depends on particle size as well as density, so the winnower feed is also separated into two size fractions. Accordingly, the dolochar from the direct reduction process is screened into four size fractions. The two size fractions of winnower feed constitute about 5000 t/month and each fraction is processed in the winnowers separately to recover the carbon. Each winnower feed size fraction is processed by a pair of winnowers in a series and in the coarse separation the dolochar is separated into three fractions i.e. tailings (ash), middlings (ash/carbon blend) and concentrate (carbon-rich dolochar).	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
	2) Winnower - in this process, feed materials that are separated by density. Particle size also plays a major part. The winnowing process is a two-stage coarse separation and refined separation. Eight pairs of winnowers process the material and each winnower is tuned to have exactly the correct airflow across it to suit the feed material. The airflow is controlled by a pressure controller which controls the pressure downstream of the winnower. In this way the constant flow of air is generated across the falling curtain of dolochar, the airflow is generated by the induced draft fan of the electrostatic precipitator (ESP) and the densest material is the ash due to iron and other metals being entrapped in it.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
3.2	Specific Conditions				

1.	Authorisation is only granted for the Wining carbon separation plant within the Magnetic Separation Plant at the existing ArcelorMittal South Africa (Vanderbijlpark Works) direct reduction area and/or building.	Compliant	2	The condition is adhered to.	No applicable recommendations.
2.	An updated project schedule with time-frames must be submitted to the Department within 30 (thirty) calendar days of the commencement of construction activities. The schedule must clearly indicate the different phases of construction (as applicable) and commissioning.	Compliant	2	The condition is adhered to. Notice was given to the Department of Environmental Affairs' (DEA) Authorisation Unit and Air Quality Unit on 10 March 2010.	No applicable recommendations.
3.	The Department must be informed of the start of commissioning at least 30 (thirty) calendar days prior to the commencement thereof.	Compliant	2	The condition is adhered to, kindly refer to condition 2 above for more details.	No applicable recommendations.
4.	Final design plans for storm water management system must be provided to the Department 30 (thirty) calendar days prior to the commencement of construction. The above design plans must include information on specific pollution prevention measures (e.g, impermeable layers, leak detection systems, etc.) and compliance with relevant SABS standards.	Compliant	2	This condition is adhered to, kindly refer to Condition 2 above for more details. ArcelorMittal has noted that a stormwater management plan and sketch for the whole Director-Reduction (DR) area was submitted, however this area is located on the second floor and no water or effluent is present.	No applicable recommendations.
5.	Should any effluent be generated from the CSP, it must be segregated into concentrated and dilute effluents in order to allow the Zero Effluent Discharge system to function optimally.	Noted/Not Applicable	0	This condition is noted as not applicable at this stage, since no water or effluent is present	No applicable recommendations.
6.	An auditable Preventative Maintenance Plan must be developed to ensure that all environmentally critical equipment such as dust extraction system, electrostatic precipitator (ESP), and others are maintained as required. The management of ArcelorMittal South Africa (Vanderbijlpark Works) is to commit to the budget to undertake the required preventative maintenance. A discussion on the implementation of and compliance with the maintenance plan must be included in the bi-annual audit reports,	Compliant	2	ArcelorMittal has developed and implemented a Preventative Maintenance Plan for all equipment. Various job cards can also be formulated from this electronic system. Therefore, the auditor considers this activity to be adhered to. However, it should be noted that Arcelor Mittal plant has not been operational during the last year of the applicable audit timeframe. Therefore, no scheduled maintenance is currently conducted.	No applicable recommendations.
7.	A finalised and detailed Environmental Management Plan (EMP) for the implementation of the project must be submitted to the Department for approval 30 (thirty) calendar days prior to the commencement of construction activities. The EMP must specifically include, inter alia the following: a) An auditable plan for monitoring all facets of the CSP project implementation and operation.	Compliant	2	This condition was adhered to.	No applicable recommendations.
	b) Air quality monitoring program based on the requirements of Condition 3.2(8).	Compliant	2	This condition is adhered to.	No applicable recommendations.

8.	In order to provide empirical data which will verify the assumptions made in the air quality report, the following air quality management, monitoring and reporting regime must be implemented and reported on in the bi-annual environmental performance audits as applicable: 8.1. The stack monitoring must be conducted annually, and the following parameters must be tested for: • PM 10 • PM 2.5	Compliant	2	Note that the plant has not been operational since 2011. However, all monitoring is conducted on a continuous basis ArcelorMittal has an electronic system that manages all monitoring results and information can be accessed through this system.	No applicable recommendations.
	8.2. The monitoring results for the above parameters must be graphically represented and included in the bi-annual audit report. Emissions must be presented at the following reference conditions: 273 Kelvin, 101, 3 kPa. Condition amended on (19/06/2012)	Compliant	2	The data is recorded in line with this requirement.	No applicable recommendations.
	8.3. The stack must be so designed that if the monitoring results in the first year indicate that there is a need for further or improved mitigation then additional technology can be easily installed in the stack,	Noted/Not Applicable	0	This condition is noted, however is not relevant to the current audit time-frame.	No applicable recommendations.
	8.4. A long-term Air Quality Management and Audit Plan must be compiled for the ArcelorMittal South Africa (Vanderbijlpark Works) CSP and Magnetic Separation Plant based on the outcome of the above monitoring results. These plans must consider international standards and best practice.	Compliant	2	A long-term Air Quality Management Monitoring system for all the Kiln's are in place. ArcelorMittal considers all applicable standards, since it is within the Vaal Air Priority Area and has very strict conditions in its existing Air Emissions Licence (AEL).	No applicable recommendations.
	8.5. Considering that ArcelorMittal South Africa (Vanderbijlpark Works) intends increasing its production capacity and is located within a hotspot area, it is therefore essential that ArcelorMittal South Africa (Vanderbijlpark Works) consider lowering the emissions more than the applicable standards require. The emission reduction strategies must be developed to make provision for the new local and applicable international standards.	Compliant	2	An Emission Reduction Strategy is in place. This policy was reviewed in April 2016 and includes reduction projects and sets out the dust monitoring results/inventories and findings. Based on the outcomes of the results and findings different projects are then created and implemented site wide.	No applicable recommendations.
9.	Detailed and up to date records must be kept of all incidents and complaints pertaining to the CSP project, how these were managed, and the prevention of their recurrence thereof. These records must be made available to the Department within 14 (fourteen) calendar days upon written request by the Department.	Compliant	2	ArcelorMittal uses the Pivot System to ensure all documents are correctly stored and access to documents are easily attained. The compliant register is also kept on this system and since the CSP has not been operational therefore no compliant have been noted.	No applicable recommendations.
10.	This Department and the Department of Water Affairs and Forestry must be informed of any major environmental and pollution incidents relating to the CSP project within 24 (twenty-four) hours of such incidents occurring.	Noted/Not Applicable	0	This condition is noted, and no such incidents have occurred.	No applicable recommendations.
11.	ArcelorMittal South Africa (Vanderbijlpark Works) must consider using flared waste gases from Coke Ovens and other sources within the industry as a fuel resource for auxiliary equipment.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
12.	AMVW must investigate the potential of using the existing dumped or stored dolochar as input material into the CSP. This must be reported in the quarterly progress report/s.	Compliant	2	This condition is adhered to and ArcelorMittal has investigated this potential. ArcelorMittal has furthermore noted that they cannot use the existing dumped dolochar (as per condition 3.2.12) as this will require a waste management license and currently there is no segregation of waste streams upon disposal. The dolochar is disposed of together with the other waste streams and can't be stored separately on the waste site for later use. When ArcelorMittal has discovered a suitable market to sell these product further investigations will be undertaken.	No applicable recommendations.

13	The operation of the CSP and the Magnetic Separation plant as a whole must comply with the Occupational Health and Safety Act (No. 85 of 1993) and sound occupational hygiene procedures implemented and improved upon. Engineering control measures must be considered as first choice for mitigation.	Compliant	2	This condition is adhered to and Health and Safety studies are conducted on a yearly basis dependable on the specific legislative requirements site wide. Across the whole site the only incidents that have come up was dust issues, and this was address by ArcelorMittal thought the implementation of various PPE apparel.	No applicable recommendations.
14.	The CSP must be integrated into the existing AMVW ISO system	Compliant	2	This condition is adhered to and the whole site is ISO accredited.	No applicable recommendations.
15.	The recommendations contained in the specialist studies submitted in support of the application for authorisation of the CSP project are regarded as an extension of the conditions of this authorisation. Implementation of or compliance with these recommendations must be discussed as part of the quarterly progress reports and bi-annual environmental performance audits thereafter.	Compliant	2	After the specialist studies were conducted, a summary of all requirements that were submitted under these studies were made. These requirements are included for all audit purposes and all additional requirements are considered. Therefore, the auditor considers this activity to be adhered to.	No applicable recommendations.
16.	All potential emergencies that can be expected from the CSP must be addressed in line with the existing Direct Reduction Plant and ArcelorMittal South Africa (Vanderbijlpark Works) emergency response procedures.	Compliant	2	This condition is adhered to and the following policies are in place: Emergency Plan - Policy Number: DR SWPGC.0263. Emergency Response Plan - Policy Number: MHROAD00005.	No applicable recommendations.
17.	The Department of Water Affairs and Forestry and any other Government Department's requirements and/or conditions pertinent to the proposed project must be complied with.	Noted/Not Applicable	0	This condition is noted. No communication has been received from the Department.	No applicable recommendations.
18.	An independent Environmental Control Officer (ECO) with an understanding of the carbon separation process must be appointed for the duration of construction and commissioning, to monitor , and report on compliance with the conditions of this authorisation	Compliant	2	This condition is adhered to and Ms. Ilze Broekman has been appointed as ECO.	No applicable recommendations.
3.3	General Conditions				
a)	Any changes to, or deviations from, the project description set out in this letter must be approved, in writing, by the Department before such changes or deviations may be affected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
b)	This Department may review the conditions contained in this letter from time to time and may, by notice in writing to the applicant, amend, add or remove a condition.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
c)	The applicant must notify the Department, in writing, at least 10 (ten) days prior to the change of ownership, project developer or the alienation of any similar rights for the activity described in this letter. The applicant must furnish a copy of this document to the new owner, developer or person to whom the rights accrue and inform the new owner, developer or person to whom the rights accrue that the conditions contained herein are binding on them.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
d)	Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.	Noted/Not Applicable	0	This condition is noted. The applicant's contact details have not change.	No applicable recommendations.

e)	Authorisation for the activity is granted in terms of the Environment Conservation Act, 1989 (Act 73 of 1989) only and does not exempt the holder from compliance with other relevant legislation.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
f)	The applicant shall be responsible for ensuring compliance with the conditions contained in this letter by any person acting on his behalf, including but not limited to, an agent, servant, or employee or any person rendering a service to the applicant in respect the activity, including but not limited to, contractors and consultants.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
g)	Departmental officials shall be given access to the property referred to in 1 above for the purpose of assessing and/ or monitoring compliance with the conditions contained in this document at all reasonable times.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
h)	The applicant must notify the Department within 24 (twenty-four) hours if any condition of this authorisation cannot, or is not, adhered to. The notification must be supplemented with reasons for non-compliance.	Noted/Not Applicable	0	This condition is noted.	No applicable recommendations.
3.4	Reporting requirements				
a)	"The occupational hygiene surveys and assessments must be done in line with the Occupational Health and Safety Act, 1993 (Act no 85 of 1993)" The subsequent report must be submitted to the department on request.	Compliant	2	The condition is adhered to and health and safety precautions are applied site wide. Furthermore, Health and Safety Assessments are done according to legislative requirements.	No applicable recommendations.
c)	A bi-annual Environmental Performance Audit conducted by an independent, accredited auditor must be submitted to the Department for review, the first audit being due 6 (six) months after commissioning of the CSP project, and every 6 (six) months thereafter. The bi-annual audit must include, inter alia, following (results in graph format as applicable): ■ Air quality monitoring and reporting as required by Condition 3.2(8),	Compliant	2	GCS Water and Environmental Consultants (Pty) Ltd Have been appointed as external independent auditor. Previous external reports were made available for review. It should be noted that CSP currently not operational.	No applicable recommendations.
	■ Discussions on the implementation (or non-implementation) of the recommendations as contained in the Environmental Impact Report and Specialist Studies,	Compliant	2	Discussions on the implementation (or non-implementation) of the recommendations as contained in the Environmental Impact Report and Specialist studies: Refer to observations made under Condition 15.	No applicable recommendations.
	■ Discussion on the following as provided for in the EMP; a. Description of the general state of plant. b. Occupational health and safety surveys. c. Discussion on the spikes that may occur in the air quality monitoring data. I d. Logbook of the wastes (if any) that were generated and where they were disposed of e. Logbook of any environmental incident,	Compliant	2	Auditor's discussion on the general state of the site: Since CSP is currently not operational, therefore, no issues or incidents of concern were noted. No waste was generated or disposed of during this past year. This is due to the fact that the plant wasn't operational during this time.	No applicable recommendations.
	■ Discussion on the implementation of and compliance with the Preventative Maintenance Plan (see 3.2(6) above),	Compliant	2	Auditors discussion on the Preventative Maintenance Plan (PMP): although the site as a whole has a PMP, the CSP specifically hasn't had a need for any maintenance at this stage, since it is currently not in operational.	No applicable recommendations.
	■ Records of any major incidents (see 3.2(9) above),	Compliant	2	No Incidents or complaints were received related to the CSP.	No applicable recommendations.
	■ Reporting on compliance with the provisions of this authorisation and the environmental management plan, and steps taken to rectify non-compliance,	Compliant	2	This condition is adhered to and ArcelorMittal has an approved EMP.	No applicable recommendations.
	■ Details on the quality and quantity of any discharge (air, water and land), reasons for discharge, management of discharges and prevention of future discharges.	Compliant	2	The only discharge at this stage is in the form of air. Find attached the air quality discharge results as included under Appendix B	No applicable recommendations.

	■ Additional jobs created as a result of this project.	Compliant	2	No additional jobs were created during this audit period since the CSP is not operational.	No applicable recommendations.
	■ Efficiency of the air pollution abatement technology i.e. dust extraction system and electrostatic precipitator.	Compliant	2	CSP is currently not in operation.	No applicable recommendations.
	■ Actual reduction of dolochar disposal and reuse of it thereof	Compliant	2	Currently there is no reuse of waste; a certain amount of the waste is sold, and the rest is disposed of. Kindly refer to observations made under condition 12.	No applicable recommendations.
3.5	Duration of authorisation				
	If the construction of the activity authorised by this letter does not commence within 1 (one) year from the date of signature of this letter, the authorisation will lapse, and the applicant will need to re-apply for authorisation in terms of the above legislation or any amendments thereto.	Noted/Not Applicable	0	This condition is not applicable for the audit period.	No applicable recommendations.
		Total Findings	49		

6 CONCLUSION AND RECOMMENDATIONS

By conducting an EPA, ArcelorMittal recognises the importance of authorisation in regulating processes related to the project.

Currently the overall compliance with the Record of Decision (ROD) (GAUT 002/05-06/0510) is noteworthy. Overall there was zero (0) incident of minor non-compliance, zero (0) incidents of moderate non-compliance, and zero (0) incidents of major non-compliance observed for the audit period. ArcelorMittal is compliant with the relevant conditions of the ROD that apply to the current status of the project. There were no incidents of non-compliances observed. This is a verification that ArcelorMittal takes their compliance to the RoD seriously and the Auditor is satisfied that the conditions of the RoD are being complied with in full.

APPENDIX A: DECLARATION OF AUDITOR INDEPENDENCE

I, **Fatima Matlou**, declare that:

- I act as the independent environmental auditor in this assessment;
- I will perform the work relating to the assessment in an objective manner, even if this results in views and findings that are not favourable to the authorisation holder;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental auditing, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activities;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in Regulation 34 of the Regulations when preparing this assessment and any report relating to it;
- I have no, and will not engage in, conflicting interests in the undertaking of this assessment;
- I undertake to disclose to the holder and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the assessment is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the assessment;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will provide the competent authority with access to all information at my disposal regarding the assessment, whether such information is favourable to the holder or not;
- All the particulars furnished by me in this form are true and correct;
- I will perform all other obligations as expected from an environmental auditor in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of Regulation 48 of the Regulations and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014.



Signature of the environmental auditor

18 June 2019

APPENDIX B: AIR QUALITY DISCHARGE

