

**Application for Alternative Emission Standards at the DR Kilns
in terms of Regulation 12A of
Government Notice 893 promulgated in terms of the
National Environmental Management:
Air Quality Act (No 39 of 2004)**

ArcelorMittal South Africa Vanderbijlpark Works

Final Report



Report Nr: 4267-ZANAMSA-2026(F)

Report date: 6 July 2026

GENERAL INFORMATION	
Report Name:	Application for Alternative Minimum Emissions Standards at the DR Kilns in terms of Regulation 12A of Government Notice 893 promulgated in terms of the National Environmental Management: Air Quality Act (No 39 of 2004)
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The opinions expressed in this report have been based on the information supplied to Zantow Environmental Consulting Services CC by the client and specialists. The opinions and conclusions in this Report are provided in response to a specific request from ArcelorMittal, Vanderbijlpark Works and is based on expert judgement. Zantow Environmental has exercised all due care in reviewing the supplied information. Whilst Zantow Environmental has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data and information. Zantow Environmental does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them.

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EXECUTIVE SUMMARY

ArcelorMittal South Africa Ltd (“AMSA”) operates the Vanderbijlpark Works, an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area in Gauteng. The facility remains strategically important to the South African steel industry and broader manufacturing value chain, supplying critical flat steel products to sectors including automotive manufacturing, construction, infrastructure development, mining, engineering, and downstream fabrication industries.

In recent years, AMSA has experienced severe and sustained financial pressure arising from a combination of adverse market and operational conditions, including declining domestic steel demand, increased competition from low-cost imports, escalating electricity and logistics costs, infrastructure constraints, and broader economic instability within the South African industrial sector. These pressures have materially affected the long-term financial sustainability of operations across the Group and have already resulted in the restructuring and closure of certain business units and operations within South Africa.

Against this background, AMSA has undertaken extensive assessments of the technical and economic feasibility of achieving compliance with certain Minimum Emission Standards (“MES”) applicable to the Direct Reduction (“DR”) Kilns at the Vanderbijlpark Works. These assessments have demonstrated that the implementation of the level of additional abatement infrastructure required to consistently achieve the applicable Minimum Emission standards (MES) for new plants, would require substantial capital expenditure and operational costs that are not financially sustainable under the current operational and economic circumstances of the facility. The technical feasibility of the available solutions has not been proven and requires significant investment in Research and Development.

The DR Kilns form an integral component of the steel manufacturing process at Vanderbijlpark Works and remain critical to the continued operation and viability of the facility. The immediate implementation of technically complex emission reduction measures to achieve the new plant standards in terms of SO₂, would place significant additional financial strain on operations that are already under considerable economic pressure, potentially threatening the continued operation of the facility and associated employment opportunities.

Accordingly, and in terms of Section 12A of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), read together with the applicable provisions of Government Notice 893, as amended, AMSA hereby applies for alternative emission limits for the SO₂ emissions at the DR Kilns at the Vanderbijlpark Works. The application is based on a detailed assessment of technical feasibility, economic sustainability, existing operational constraints, current ambient air quality considerations, and the principles of the Best Practicable Environmental Option (“BPEO”) as recognised within the National Framework for Air Quality Management in the Republic of South Africa (2017).

This application does not seek to avoid environmental responsibility or undermine the objectives of air quality management. Rather, it seeks to establish alternative emission limits that are technically achievable, environmentally justifiable, and economically sustainable within the current operational context of the facility, while allowing AMSA to continue implementing progressive operational improvements and emission reduction measures, where reasonably practicable.

Changes Since the 2025 Application

A previous application for alternative SO₂ emission limits in terms of Regulation 12A of Government Notice 893 was submitted by ArcelorMittal South Africa during 2025. That application was supported by a Motivation Report, Atmospheric Impact Report (AIR) and Community Health Risk Assessment (HHRA)

based on the operational strategy, decarbonisation roadmap and future plant configuration applicable at the time.

Following submission of the application, ArcelorMittal South Africa experienced significant changes in its operational strategy, business environment and long-term capital planning. These changes included the closure of several coke batteries, a revised production strategy for the Vanderbijlpark Works, the cancellation of the previously proposed Electric Arc Furnace (EAF) transition, and the discontinuation of the planned coke oven gas cleaning and desulphurisation projects. The future operational configuration has consequently shifted towards a reduced operational footprint, increased reliance on externally sourced coke and a revised decarbonisation pathway based on phased implementation of financially sustainable projects.

As these changes materially affected the future emissions profile, operational configuration and assumptions underpinning the original specialist studies, ArcelorMittal South Africa elected to withdraw the previous application and prepare a revised application based on the current operational strategy. The withdrawal was undertaken to ensure that the Competent Authority considers an application founded on realistic operating conditions, updated emissions inventories and achievable future operational scenarios rather than assumptions that are no longer applicable. (Refer to **Annexure E.**)

Accordingly, the present application is **not** a resubmission of the 2025 application, but a comprehensive reassessment supported by updated specialist investigations and revised operational assumptions. The application incorporates:

- an updated Motivation Report reflecting the current operational strategy and revised decarbonisation pathway;
- a revised Atmospheric Impact Report based on updated emissions inventories and five operational modelling scenarios;
- an updated Community Health Risk Assessment based on the revised atmospheric modelling results;
- revised works-wide SO₂ emission reduction scenarios demonstrating continued reductions under the proposed future operational configuration;
- additional technical information regarding historical emission reductions, technology investigations and SO₂ mitigation trials;
- a comprehensive response to comments received during both the previous and current public participation processes; and
- revised public participation documentation reflecting the current application and supporting specialist findings.

The current application should therefore be considered on its own merits and evaluated against the updated technical information, specialist studies and operational assumptions presented herein. It represents ArcelorMittal South Africa's current and best available assessment of the technically achievable, environmentally acceptable and economically sustainable pathway for the continued operation of the Direct Reduction Kilns, while continuing to pursue further emission reduction opportunities over time.

The postponement of selected capital projects should not be interpreted as abandonment of AMSA's decarbonisation objectives, but rather reflects the need to sequence implementation in line with financial sustainability and evolving market conditions.

New S12A Application

The ArcelorMittal Vanderbijlpark Works was issued an Atmospheric Emissions License (AEL) (AEL 0003/SDM/2012) by the Sedibeng District Municipality on the 29th September 2023 after a renewal and amendment process was completed. The following Listed Activities published in GN 893 (as amended) in terms of Section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) are therefore authorised in terms of the AEL (0003/SDM/2012), expiring on the 30th September 2028.

Table 1: Authorised NEMAQA S21 Listed Activities

NEMAQA S21	SUBCATEGORY
Category 1: Combustion Installations	Subcategory 1.4: Gas Combustion Installations
Category 3: Carbonization and Coal Gasification	Subcategory 3.1: Combustion Installations
	Subcategory 3.2: Coke Production
	Subcategory 3.3: Tar Processes
Category 4: Metallurgical Industry	Subcategory 4.2 Combustion Installations
	Subcategory 4.5: Sinter Plants
	Subcategory 4.6: Basic Oxygen Furnaces
	Subcategory 4.7: Electric Arc Furnaces (Primary and Secondary)
	Subcategory 4.8: Blast Furnaces
	Subcategory 4.10: Foundries
	Subcategory 4.11: Agglomeration Operations
	Subcategory 4.12: Pre-Reduction and Direct Reduction
Category 5: Mineral Processing, Storage and Handling	Subcategory 4.22: Hot Dip Galvanizing
	Subcategory 5.1: Storage and Handling of Ore and Coal
Category 7: Inorganic Chemicals Industry	Subcategory 7.2: Production of Acids

This application relates to “**Subcategory 4.12:** Pre-Reduction and Direct Reduction”.

The ArcelorMittal Vanderbijlpark Works, DR Kilns plant was operational prior to 1 April 2010 and was therefore regarded as “*existing plants*” in terms of GN 893 as amended. Part 2, Paragraph 10 of GN893 states that “*Existing plant must comply with minimum emission standards for new plant as contained in Part 3 by 01 April 2020, unless where specified.*”

Paragraph 12(A) of GN 893 as amended continues to state that;

- a. *"An existing plant may submit an application regarding a new plant standard to the National Air Quality Officer for consideration if the plant is in compliance with other emission standards but cannot comply with a particular pollutant or pollutants.*
- b. *An application must demonstrate a previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.*
- c. *The National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if:*
 - i. *there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or*
 - ii. *the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard.*

On the 29th March 2019, ArcelorMittal applied for a postponement along with alternative plant standards (**Annexure A**). The postponement application was granted 23rd March 2020 for alternative standards for the following facilities.

Table 2: Current Approved Alternative Emission Limits

NEMAQA S21 Category	Appliance	Postponement / Alternative Timeframe	Minimum Emission Standards (mg/Nm ³)			Decision
			Pollutant	Existing Plant 2015	New Plant 2020	
Subcategory 3.2: Coke Production "Coke production and by-product recovery"	Coke Battery 4	2020 - 2025	Hydrogen sulphide (H ₂ S)	10	7	Postponement to achieve 7 mg/Nm ³ by 31 March 2025 was granted with an interim emission limit of <u>40 mg/Nm³</u> approved.
	Coke Battery 6					Postponement to achieve 7 mg/Nm ³ by March 2025 was granted with an interim emission limit of <u>50 mg/Nm³</u> approved.
	Coke Battery 7					Postponement to achieve 7 mg/Nm ³ by March 2025 was granted with an interim emission limit of <u>70 mg/Nm³</u> approved.
	Coke Battery 8					Postponement to achieve 7 mg/Nm ³ by March 2025 was granted with an interim emission limit of <u>50 mg/Nm³</u> approved.
	Coke Battery 9					Postponement to achieve 7 mg/Nm ³ by March 2025 was granted with an interim emission limit of <u>30 mg/Nm³</u> approved.
Subcategory 4.12: Pre-reduction and Direct Reduction	DR Kiln Stack 3	2025 – 2025	Sulphur dioxide (SO ₂)	1 700	500	ArcelorMittal requested an alternative limit of 1 700 mg/Nm ³ , however only <u>800 mg/Nm³</u> was granted until 2025.

NEMAQA S21 Category	Appliance	Postponement / Alternative Timeframe	Minimum Emission Standards (mg/Nm ³)			Decision
			Pollutant	Existing Plant 2015	New Plant 2020	
"Production of pre-reduced or metallised ore or pellets using gaseous or solid fuels"	DR Kiln Stack 4					ArcelorMittal requested an alternative limit of 1 700 mg/Nm ³ , however only <u>500 mg/Nm³</u> was granted until 2025.
	DR Kiln Stack 5					ArcelorMittal requested an alternative limit of 1 700 mg/Nm ³ , however only <u>700 mg/Nm³</u> was granted until 2025.
	DR Kiln Stack 6					ArcelorMittal requested an alternative limit of 1 700 mg/Nm ³ , however only <u>750 mg/Nm³</u> was granted until 2025.

ArcelorMittal indicated that the H₂S levels at the Coke Ovens are to be excluded from this application as it forms part of separate discussions. The H₂S levels at the Coke Ovens therefore does not form part of this application.

It is important to note that ArcelorMittal South Africa did not previously request alternative SO₂ emission limits of 500 mg/Nm³ to 800 mg/Nm³ for the DR kilns. The company historically requested an alternative limit aligned with the existing plant standard of 1 700 mg/Nm³, while the substantially lower limits ultimately approved through the postponement process subsequently proved to be technically unachievable under normal operating conditions despite ongoing optimisation and mitigation efforts.

Stack emissions monitoring results between 2020 to 2025 indicate that all PM and NO_x emissions at the Direct Reduction Kilns (DR Kilns) plant are compliant with the MES for new plants, however SO₂ emission levels, have not been able to achieve the MES for new plants nor the alternative limit as approved in terms of the previous postponement granted on the 23rd March 2020.

The Direct Reduction route is a supplementary iron making route that utilises coal as the reductant for the chemical reduction of iron ore. At ArcelorMittal South Africa's Vanderbijlpark Works, six rotary kilns have been installed to heat iron ore, coal and additives to produce sponge iron. The sponge iron produced is subsequently utilised within the steelmaking processes, including the blast furnaces and the steelmaking plant.

The waste gases generated during the reduction process are extracted from the kiln system and directed to waste heat boilers where process steam is generated. Dust particles contained in the waste gas stream are removed through Electrostatic Precipitators (ESPs) prior to discharge via the main stacks.

Emissions monitoring conducted at the Direct Reduction ("DR") Kilns indicates that the applicable new plant SO₂ emission limit of 500 mg/Nm³ cannot currently be achieved on a technically and economically sustainable basis under the existing operational configuration and available technology solutions applicable to the Vanderbijlpark Works. Accordingly, ArcelorMittal South Africa hereby applies, in terms of Section 12A of Government Notice 893 (as amended), **for an alternative SO₂ emission limit of 1 500 mg/Nm³ for DR Kilns. The facility will, however, reduce the number of Kilns to remain operational.**

At this stage, AMSA is unable to commit to a definitive compliance date for achieving the current new plant standard of 500 mg/Nm³, as the long-term compliance pathway remains dependent on ongoing

research, technology assessments, operational trials, and the development of technically feasible and economically sustainable emission reduction solutions for the DR Kiln process. The feasibility and implementation timeframe of potential reduction technologies are further influenced by the current financial constraints affecting the Group and the evolving operational strategy for the Vanderbijlpark Works.

Based on the current understanding of the technical requirements, research timelines, capital investment implications, and anticipated phased operational transition of the facility, AMSA anticipates that a period of approximately 10 years may reasonably be required to investigate, develop, assess, and potentially implement a viable long-term SO₂ reduction solution for the DR Kilns. AMSA therefore requests that the Competent Authority consider granting the proposed alternative emission limit for an interim period aligned with this anticipated transition and technology development timeframe, subject to ongoing review, progress reporting, and continued investigation into feasible emission reduction measures.

Table 3 Proposed Alternative Emission Standards

NEMAQA S21 Category	Appliance	Postponement / Alternative Timeframe	Minimum Emission Standards (mg/Nm ³)			Requested Alternative Emission Standard
			Pollutant	Existing Plant 2015	New Plant 2020	
Subcategory 4.12: Pre-reduction and Direct Reduction "Production of pre-reduced or metallised ore or pellets using gaseous or solid fuels"	DR Kiln Stack 1	1 April 2025 Up to April 2035	Sulphur dioxide (SO ₂)	1 700	500	Plant shut down
	DR Kiln Stack 2					Plant shut down
	DR Kiln Stack 3					Plant shut down
	DR Kiln Stack 4					1 500 mg/Nm ³
	DR Kiln Stack 5					1 500 mg/Nm ³
	DR Kiln Stack 6					1 500 mg/Nm ³

This report serves as an application in terms of Regulations 12A of GN 893 to request alternative emission limits for the Direct Reduction Kilns as listed in Table 3 above. **AMSA requests the alternative emission limit until 30 April 2035, subject to periodic review by the Competent Authority.**

Motivation and reasons for the alternative limits

Paragraph 12(A) of GN 893 as amended, requires the applicant to provide an application with motivation on the following requirements, which has been addressed in this report.

- Compliance levels to other pollutants emission limits at the DR Kilns
- Previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.
- Acceptable ambient air quality for the pollutant in question compared to the National ambient air quality standards in the area
- An Atmospheric Impact Report which indicates the increased health risk where there is no ambient air quality standard.

Section 5 and 6 of this report contains a detailed description of the motivations and justification for the request for alternative emission limits which includes the following:

- Demonstration of the DR Kilns compliance to PM and NO_x new plant standards.
- Current emission performance in terms of SO₂ at the DR Kilns.
- Proposed overall SO₂ emission load reduction for the Works as “off set” to the kiln emissions.
- Performance in terms of the National Ambient Air Quality Standards
- Socio-economic impacts

ArcelorMittal South Africa has indicated that the Direct Reduction (“DR”) Kilns are currently unable to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³ under existing operational conditions and available technically feasible mitigation measures. Investigations and operational trials have been undertaken to assess potential emission reduction interventions, including the use of lower sulphur coal blends. However, the trials undertaken to date did not demonstrate sufficient SO₂ emission reductions to consistently achieve the applicable new plant standard of 500 mg/Nm³. The coal currently utilised within the DR Kiln process contains a sulphur content ranging between approximately 0.7% and 1.8%, with an average sulphur content of approximately 1.4%, which remains a significant contributing factor to the resulting SO₂ emissions associated with the process.

The emissions scenarios applied in the previous Section 12A assessment have been revised to reflect the materially changed operational strategy now applicable to the Vanderbijlpark Works. The previous assessment was based on a future strategy that included additional coke battery infrastructure, a new gas cleaning plant, and a proposed EAF route. These assumptions are no longer applicable. The amended assessment therefore introduces updated current and future operating scenarios based on the presently anticipated plant configuration, including the shutdown of Coke Batteries 6 to 9, the continued operation of only Coke Battery 4 under certain scenarios, the exclusion of the previously proposed new gas plant and EAF route, and revised assumptions regarding DR kiln operation, gas usage, and production profiles. The updated scenarios are intended to provide a more realistic and defensible basis for evaluating future SO₂ emissions and the implications of the requested alternative emission limit.

In support of this requirement, a detailed Community Health Risk Assessment was undertaken by INFOTOX, which concluded that the proposed alternative DR Kiln SO₂ emission limit would not result in a material increase in community health risk at the assessed receptor locations.

Scenario Assessment

To evaluate the implications of different emission control strategies, a number of emission inventory scenarios were developed.

Scenario	Main Findings								
Scenario 1 – Baseline (Maximum Operations) The baseline scenario represents the 2018 operational year, during which production levels at Vanderbijlpark Works were significantly higher than in subsequent years. This year therefore represents a realistic maximum operational baseline for emissions. This scenario reflects operations where most plant units were still operational, including multiple coke batteries and higher production levels.	Under this baseline scenario, the total Works emission loads were estimated as: <table border="1"> <thead> <tr> <th>Pollutant</th><th>Emissions (tons/year)</th></tr> </thead> <tbody> <tr> <td>NO_x</td><td>4695,9</td></tr> <tr> <td>SO₂</td><td>9764,9</td></tr> <tr> <td>PM</td><td>901,2</td></tr> </tbody> </table>	Pollutant	Emissions (tons/year)	NO _x	4695,9	SO ₂	9764,9	PM	901,2
Pollutant	Emissions (tons/year)								
NO _x	4695,9								
SO ₂	9764,9								
PM	901,2								
Scenario 2 – Current Operational Configuration	Under the current configuration, total Works emissions are estimated as: <table border="1"> <thead> <tr> <th>Pollutant</th><th>Emissions (tons/year)</th></tr> </thead> <tbody> <tr> <td>NO_x</td><td>3453,5</td></tr> </tbody> </table>	Pollutant	Emissions (tons/year)	NO _x	3453,5				
Pollutant	Emissions (tons/year)								
NO _x	3453,5								

Scenario	Main Findings								
The current operational configuration reflects the significant restructuring of operations between 2024 and 2025, including: • Closure of Coke Batteries 6, 7, 8 and 9; • Only Coke Battery 4 remaining operational; • Operation of three Direct Reduction kilns; • Two blast furnaces and two BOF furnaces in operation.	<table border="1"> <tr> <td>SO₂</td><td>9 989,1</td></tr> <tr> <td>PM</td><td>746,5</td></tr> </table> The total SO₂ emissions have increased somewhat relative to the baseline, mainly due to a higher SO₂ concentration measured during the year at the Direct Reduction kilns and the Sinter Plant. Taking that into account the switched off coke ovens contributed 489 tons compared with scenario 1.	SO ₂	9 989,1	PM	746,5				
SO ₂	9 989,1								
PM	746,5								
Scenario 3 – Future Strategy (Alternative Limit 1 500 mg/Nm³) Under the proposed scenario, the following operational configuration is assumed: • Full operation of sinter and blast furnace operations; • Operation of three DR kilns, with two operational and one in standby; • Three DR Kilns offline at all times. • Operation of two BOF furnaces; • No Electric Arc Furnace; • Coke Battery 4 remaining operational. The DR kilns are assumed to operate at the requested alternative emission limit of 1 500 mg/Nm³.	Under this scenario, the estimated total Works emissions are: <table border="1"> <thead> <tr> <th>Pollutant</th><th>Emissions (tons/year)</th></tr> </thead> <tbody> <tr> <td>NO_x</td><td>3 397,6</td></tr> <tr> <td>SO₂</td><td>9 133,3</td></tr> <tr> <td>PM</td><td>730,5</td></tr> </tbody> </table> This represents a reduction of 6% against the baseline with 3 kilns at Alternative Limit of 1500 and 1 coke battery operational (but with no gas plant), or a 9% reduction against the current 2025 emissions with 3 kilns at Alternative Limit of 1500 and 1 coke battery operational (no gas plant).	Pollutant	Emissions (tons/year)	NO _x	3 397,6	SO ₂	9 133,3	PM	730,5
Pollutant	Emissions (tons/year)								
NO _x	3 397,6								
SO ₂	9 133,3								
PM	730,5								

Scenario	Main Findings								
Scenario 4 – Future Strategy without Coke Battery 4 Under the proposed scenario, the following operational configuration is assumed: • Full operation of sinter and blast furnace operations; • Operation of three DR kilns, with two operational and one in standby; • Three DR Kilns offline at all times. • Operation of two BOF furnaces; • No Electric Arc Furnace; • Shut down of Coke Battery 4 The DR kilns are assumed to operate at the requested alternative emission limit of 1 500 mg/Nm³.	If Coke Battery 4 is also removed from operation, the total SO₂ emissions reduce further to: <table border="1"> <thead> <tr> <th>Pollutant</th><th>Emissions (tons/year)</th></tr> </thead> <tbody> <tr> <td>NO_x</td><td>2552,3</td></tr> <tr> <td>SO₂</td><td>8270,8</td></tr> <tr> <td>PM</td><td>703,7</td></tr> </tbody> </table> This represents a 15% reduction of approximately in SO₂ compared to the baseline scenario.	Pollutant	Emissions (tons/year)	NO _x	2552,3	SO ₂	8270,8	PM	703,7
Pollutant	Emissions (tons/year)								
NO _x	2552,3								
SO ₂	8270,8								
PM	703,7								
Scenario 5 – Future scenario with MES Compliance (500 mg/Nm³) A theoretical scenario was also evaluated where the DR kilns achieve the new plant SO₂ emission standard of 500 mg/Nm³.	Under this scenario the total Works SO₂ emissions would reduce to: <table border="1"> <thead> <tr> <th>Pollutant</th><th>Emissions (tons/year)</th></tr> </thead> <tbody> <tr> <td>NO_x</td><td>3397,6</td></tr> <tr> <td>SO₂</td><td>7572,4</td></tr> <tr> <td>PM</td><td>730,5</td></tr> </tbody> </table> This represents a SO₂ reduction of approximately 22% compared to the baseline scenario. This scenario is then the final outcome in about 10 years, pending the successful implementation of the suitable technology.	Pollutant	Emissions (tons/year)	NO _x	3397,6	SO ₂	7572,4	PM	730,5
Pollutant	Emissions (tons/year)								
NO _x	3397,6								
SO ₂	7572,4								
PM	730,5								

Conclusion of Scenario Evaluation

The updated scenario assessment demonstrates that the overall SO₂ emission profile of the ArcelorMittal Vanderbijlpark Works is significantly influenced not only by the Direct Reduction (“DR”) Kilns, but also by the broader operational configuration of the integrated steelworks, including the status of the coke ovens, blast furnaces, sinter plants, and associated fuel gas systems.

The 2018 baseline scenario resulted in a total estimated SO₂ load of approximately **9 764,9 tonnes per annum**, representing a high-production operational period. The current operational scenario reflects a total estimated SO₂ load of approximately **9 989,1 tonnes per annum**, largely influenced by the continued operation of the DR kilns at currently measured emission concentrations, together with the revised operational gas balance following the shutdown of Coke Batteries 6 to 9 and the absence of a new gas cleaning plant.

Under the future operational strategy scenarios applying the requested alternative emission limit of **1 500 mg/Nm³** for the DR kilns, the total estimated SO₂ load reduces to approximately **9 133,3 tonnes per annum** where Battery 4 remains operational and further reduces to approximately **8 270,8 tonnes per annum** under the scenario where Battery 4 is no longer operational. These reductions indicate that operational restructuring and reduced coke oven-related emissions contribute materially toward lowering the overall works-wide SO₂ emission load, despite the continued operation of the DR kilns at the proposed alternative emission limit.

The assessment further indicates that the scenario assuming compliance with the current Minimum Emission Standard ("MES") of **500 mg/Nm³** for the DR kilns would result in a total estimated SO₂ load of approximately **7 572,4 tonnes per annum**. While this represents the lowest overall SO₂ load of the scenarios assessed, the technical and economic assessments undertaken by ArcelorMittal indicate that achieving and sustaining this emission concentration at the DR kilns is currently not considered technically feasible or economically sustainable within the present operational and financial constraints applicable to the Vanderbijlpark Works.

Importantly, since 2005 - **85% SO₂** Works wide reduction have been achieved with the assessment demonstrating significant ongoing reductions through broader operational optimisation, plant rationalisation, reduced coke production capacity, altered fuel gas usage profiles, and strategic operational restructuring, even where the DR kilns operate under an alternative emission limit. The results therefore indicate that the requested alternative emission limit should be evaluated within the context of the total integrated works emissions profile and the broader operational transition currently underway at the Vanderbijlpark Works.

The scenario analysis further supports the position that the requested alternative emission limit of **1 500 mg/Nm³** for the DR kilns represents a more realistic and operationally achievable interim emission level while ongoing investigations, technology assessments, operational optimisation initiatives, and future emission reduction opportunities continue to be evaluated.

The scenario analysis demonstrates that by implementing the **future strategy with the requested alternative emission limit of 1 500 mg/Nm³** still results in a **significant reduction in comparison with baseline scenario in overall plant SO₂ emissions**, compared to baseline operating conditions.

Furthermore, this scenario:

- Enables continued operation of the Direct Reduction kilns;
- Supports the broader **sustainable operations** of the Vanderbijlpark Works;
- Maintains socio-economic stability associated with continued steel production.

For these reasons, the requested alternative emission limit of 1 500 mg/Nm³ for the Direct Reduction kilns represents the most reasonable and balanced environmental outcome when considering both environmental and socio-economic factors.

While the Minimum Emission Standards prescribe point source emission limits for individual processes, the overall objective of the National Environmental Management: Air Quality Act and the Vaal Triangle Airshed Priority Area Air Quality Management Plan is the improvement of ambient air quality within the airshed through measurable reductions in total emission loads.

The scenario analysis undertaken for the Vanderbijlpark Works demonstrates that the implementation of the proposed strategy results in meaningful reductions in overall plant-wide emissions, even where certain legacy processes, such as the Direct Reduction kilns, cannot feasibly achieve the new plant SO₂ emission limit of 500 mg/Nm³. The analysis shows that, through operational restructuring, closure of several baseline emission sources and optimisation of existing processes, the total SO₂ emissions from the Works are expected to reduce significantly relative to historic baseline conditions.

The installation of dedicated SO₂ abatement technologies on the DR kilns would require substantial capital investment with limited environmental benefit at an airshed scale, particularly when considering the remaining operational life of the units and the current operational and financial constraints affecting the facility. In contrast, the broader operational optimisation and restructuring measures proposed for the Vanderbijlpark Works are expected to provide wider environmental benefits, including improved energy efficiency, operational streamlining, and reductions in overall emissions loads from selected plant areas across the facility.

The requested alternative emission limit of 1 500 mg/Nm³ for the DR kilns therefore represents a balanced and pragmatic regulatory outcome, which allows for continued implementation of the plant-wide emission reduction strategy while ensuring that the overall emission footprint of the Vanderbijlpark Works continues to decline in alignment with the objectives of the Vaal Triangle Airshed Priority Area Air Quality Management Plan.

- Indirect reduction or avoidance
 - Install a new 200 MW Solar Farm.
 - Construction of a waste management facility for Emfuleni Municipality to promote waste handling and reduce illegal waste burning and disposal.

Emission Reduction Summary

Historical emissions trend analysis, from 2005 up to now, for the Vanderbijlpark Works demonstrates that substantial reductions in overall SO₂ emissions have already been achieved over the past two decades through operational optimisation, infrastructure upgrades, plant rationalisation, and the shutdown of selected high-emitting operational units. **Overall SO₂ emissions have reduced by approximately 85% over the last 20 years** through measures including the decommissioning of multiple coke batteries, shutdown of the Electric Arc Furnace (“EAF”), implementation of emissions reduction and gas management projects, improved sinter plant baghouse performance, reduced gas consumption, operational stabilisation, and broader operational restructuring initiatives. Most recently, the shutdown of Coke Batteries 6, 7, 8 and 9 during 2024 and 2025 contributed significantly toward reducing the overall SO₂ emissions load associated with the Vanderbijlpark Works.

These historical reductions demonstrate that ArcelorMittal South Africa has consistently implemented measures aimed at reducing the overall emissions footprint of the facility, notwithstanding the continued technical and operational challenges associated with achieving the applicable new plant SO₂ emission standard at the Direct Reduction (“DR”) Kilns.

The updated scenario assessment indicates that measurable reductions in overall SO₂ emissions can be achieved under the revised operational configurations proposed for the Vanderbijlpark Works, even where the Direct Reduction (“DR”) Kilns operate under the requested alternative emission limit of 1 500 mg/Nm³.

The assessment indicates that operation of three DR kilns at the proposed alternative emission limit of 1 500 mg/Nm³, together with the continued operation of a single coke battery and without the implementation of a gas cleaning plant, would result in an overall SO₂ reduction of approximately 6% relative to the 2018 baseline scenario and approximately 9% relative to the current operational emissions profile.

Under the scenario where three DR kilns operate at the proposed alternative emission limit of 1 500 mg/Nm³ and no coke batteries remain operational, the assessment indicates an estimated overall SO₂ reduction of approximately 15% relative to the baseline scenario and approximately 17% relative to the current operational emissions profile.

The assessment further indicates that, should the DR kilns theoretically achieve compliance with the applicable new plant Minimum Emission Standard ("MES") of 500 mg/Nm³, the overall works wide SO₂ emissions could reduce by approximately 22% relative to the baseline scenario and approximately 24% relative to the current operational emissions profile.

These findings demonstrate that significant overall SO₂ emission reductions can still be achieved through broader operational restructuring, reduced coke production capacity, and revised operational configurations across the Vanderbijlpark Works, notwithstanding the operational limitations associated with achieving the current MES requirement at the DR kilns.

Air Quality Impact Report

Regulation 12A of GN 893 stipulates that the competent authorities can approve the alternative emissions, if there is no material exceedance of the ambient air quality limits for the particular pollutant in questions (i.e. SO₂) and or where there is no ambient standard *"the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard"*.

The SO₂ ambient air quality measured by the ambient air quality stations in the Vaal Triangle and surrounding area, indicates material compliance to the SO₂ ambient air quality standards. The Vaal Triangle was declared a priority area, with the main pollutant of concern being particulate matter.

It is noted that Regulation 12A(c)(ii) of Government Notice 893 (as amended) specifically requires that an Atmospheric Impact Report ("AIR") demonstrate that there will not be a material increased health risk in circumstances where no ambient air quality standard exists for the pollutant under consideration. In the present application, however, sulphur dioxide ("SO₂") is a regulated criteria pollutant for which National Ambient Air Quality Standards ("NAAQS") have already been formally established in South Africa.

Strictly interpreted, the primary applicable legal consideration for the current application therefore relates to Regulation 12A(c)(i), namely whether there is material compliance with the applicable National Ambient Air Quality Standards for SO₂ within the receiving environment. The undertaking of a detailed Community Health Risk Assessment ("HHRA") was therefore not strictly required as a mandatory regulatory prerequisite for the present Section 12A application.

Notwithstanding this position, ArcelorMittal South Africa elected to voluntarily undertake both a comprehensive Atmospheric Impact Report and a detailed Community Health Risk Assessment in support of the application as part of a broader duty of care, transparency, and precautionary approach toward environmental management and stakeholder engagement.

The inclusion of the AIR and HHRA was intended to provide the Competent Authority, stakeholders, and surrounding communities with a more comprehensive understanding of the potential ambient air quality and community health implications associated with the proposed alternative SO₂ emission limit, notwithstanding the fact that ambient SO₂ standards already exist and are applicable within the study area.

The specialist studies therefore provide additional technical support and environmental transparency beyond the minimum regulatory requirements applicable to the Section 12A application and demonstrate that the proposed alternative emission limit would not result in unacceptable ambient air quality impacts, or a material increase in community health risk at the assessed sensitive receptor locations.

In order to assist the competent authority decision making process as well as stakeholder engagement, an Atmospheric Impact Report (AIR) was undertaken by Airshed Planning Professionals (Pty) Ltd in support of the application for alternative Emission Standards. A full copy of the AIR is attached to this report under **Annexure B**.

The AIR confirms that the Vanderbijlpark Works is an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area and is subject to the Minimum Emission Standards ("MES") promulgated in terms of Section 21 of the National Environmental Management: Air Quality Act,

2004 (Act No. 39 of 2004). The report notes that the DR kilns are unable to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³ and that ArcelorMittal South Africa therefore intends applying for an alternative SO₂ emission limit of 1 500 mg/Nm³ for these units.

The AIR included a detailed dispersion modelling assessment based on five operational scenarios, namely:

- a 2018 baseline operational scenario;
- the current operational configuration;
- future operational scenarios assuming operation of the DR kilns at an alternative limit of 1 500 mg/Nm³;
- a future scenario assuming closure of all coke batteries; and
- a theoretical future scenario assuming compliance with the new plant SO₂ standard of 500 mg/Nm³.

The assessment considered emissions from major operational sources across the Vanderbijlpark Works, including the sinter plants, coke ovens, blast furnaces, Direct Reduction kilns, power generation units, rolling mills, and associated operational processes. The dispersion modelling assessment evaluated the potential impacts of SO₂, NO₂ and particulate matter emissions on surrounding sensitive receptors and compared predicted ground level concentrations against the applicable National Ambient Air Quality Standards ("NAAQS").

The AIR concluded that the future operational scenarios associated with the revised operational configuration of the Vanderbijlpark Works would result in reductions in overall plant wide SO₂ emission loads compared to historical operational conditions, notwithstanding the continued operation of the DR kilns under the proposed alternative emission limit scenario. The assessment further demonstrated that operational restructuring measures, including the shutdown of several coke batteries and reduced operational capacity of certain legacy units, contribute toward reductions in overall emissions from the Works.

Based on the modelling assessment and scenario evaluation undertaken, the AIR provides technical support for the proposed Section 12A application by demonstrating the broader emissions reduction benefits associated with the revised operational configuration of the Vanderbijlpark Works, while acknowledging the technical and operational limitations associated with achieving the applicable new plant SO₂ emission standard at the DR kilns.

The results of the study can be summarised as follows that pertains to the Alternative Emission Limit application:

- The scenarios will result in a decrease of ground-level SO₂ concentrations (on the average at the selected receptors for annual) of 12%, 18%, 25% and 27% for scenario 2, 3, 4 and 5 respectively.
- Dispersion modelling shows that simulated concentrations at all AQSRs would be within NAAQS for all the scenarios.

The Atmospheric Impact Report therefore demonstrates compliance with the legal test contained in Regulation 12A(c)(i), namely that there is material compliance with the National Ambient Air Quality Standards for SO₂ within the receiving environment.

Summary of the Community Health Risk Assessment

INFOTOX (Pty) Ltd was appointed to undertake a Community Health Risk Assessment ("HHRA") in support of the Section 12A application for an alternative SO₂ emission limit applicable to the Direct Reduction ("DR") Kilns at the ArcelorMittal South Africa Vanderbijlpark Works. The HHRA was undertaken in conjunction with the Atmospheric Impact Report ("AIR") prepared by Airshed Planning Professionals and specifically evaluated potential community health risks associated with exposure to sulphur dioxide ("SO₂") emissions under the various operational scenarios assessed as part of the application.

The HHRA assessed community exposure to modelled ambient SO₂ concentrations at sensitive receptor locations surrounding the Vanderbijlpark Works, including residential areas, schools, and healthcare facilities located within the study area. The assessment utilised the modelled ambient SO₂ concentrations generated through the AIR dispersion modelling assessment for the five operational scenarios evaluated as part of the Section 12A application process.

The assessment considered internationally accepted epidemiological approaches and risk assessment methodologies associated with exposure to criteria air pollutants, including guidance and scientific information published by the World Health Organization (“WHO”) and the United States Environmental Protection Agency (“USEPA”). The primary health outcomes evaluated in the HHRA included:

- all-cause mortality; and
- asthma exacerbation resulting in emergency room visits or hospital admissions.

The HHRA utilised attributable fraction (“AF”) calculations to evaluate the potential increase in health risks associated with the various SO₂ exposure scenarios. The assessment concluded that the calculated attributable fractions for all evaluated receptor locations remained extremely low, generally within the range regarded as insignificant from a practical health risk perspective.

The report concluded that:

- the calculated attributable fractions associated with asthma exacerbation and natural mortality at all assessed receptor locations were insignificantly low;
- the associated health risks under all assessed scenarios, including the proposed alternative emission limit scenario of 1 500 mg/Nm³, would be insignificantly different from current or background health risks; and
- implementation of the proposed alternative SO₂ emission limit would not result in a material increase in community health risk associated with ambient SO₂ exposure.

The HHRA further evaluated ambient SO₂ monitoring data recorded between 2021 and 2025 at the Vanderbijlpark Monitoring Station located within the study area. The measured 24-hour and annual average SO₂ concentrations remained below the applicable National Ambient Air Quality Standards (“NAAQS”) during the monitoring period.

The assessment additionally considered prevailing wind conditions and dispersion patterns within the study area. Based on the wind direction analysis and ambient monitoring information, INFOTOX concluded that the ArcelorMittal Vanderbijlpark Works makes an insignificant contribution to ambient SO₂ concentrations measured within the surrounding residential areas assessed in the study.

The HHRA therefore concluded that:

- implementation of the proposed alternative SO₂ emission limit of 1 500 mg/Nm³ for the DR kilns would not result in exceedances of the applicable SO₂ National Ambient Air Quality Standards within the study area; and
- the associated community health risks resulting from ambient SO₂ exposure under the assessed scenarios would remain insignificant.

The findings of the HHRA accordingly support the conclusion that the proposed alternative SO₂ emission limit for the DR kilns would not result in a material increase in ambient SO₂-related health risks at the assessed sensitive receptor locations surrounding the Vanderbijlpark Works.

The HHRA therefore provides an additional and independent line of evidence supporting the conclusions of the Atmospheric Impact Report.

Public Participation

Notice was given that ArcelorMittal South Africa Ltd: Vanderbijlpark Works (“AMSA VDB”) intend to submit an application for an alternative plant standard for the DR Kilns at the AMSA: VDB, Emfuleni Local Municipality, Gauteng Province.

The application is made in terms of Regulation 12A of Government Notice 893 (“Notice”) promulgated in terms of Section 21 of the National Environmental Management: Air Quality Act, No 39 of 2004 (“NEMAQA”). Government Notice 893 contains the Listed Activities and Associated Minimum Emission Standards identified in terms of Section 21 of the NEMAQA. The application is submitted to the National Air Quality Officer as required by regulation (12A) of the Notice.

AMSA VDB has undertaken an Air Impact Report in support of the application for an alternative plant standard for the DR Kilns operating at AMSA VDB Works as contemplated in the NEMAQA (as amended), as well as a Health Risk Assessment, which forms part of the motivation for the application.

AMSA VDB has appointed Zantow Environmental Consulting Services to undertake a Public Participation Process (PPP) for the above-mentioned application. According to Section (2)(4)(f) and (o) of the National Environmental Management Act (Act 107 of 1998) – “NEMA” (as amended):

- the participation of all Interested and Affected Parties (I & APs) in environmental governance must be promoted, and people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation.
- Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.
- the environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest, and the environment must be protected as the people’s common heritage.

In order to give effect to the above-mentioned principles, it is essential to ensure that there is adequate and appropriate opportunity for public participation in decisions that may affect the environment. In this regard, Zantow Environmental Consulting Services considered the PPP guideline (as revised) as contemplated in Section 24J of the NEMA to ensure for a comprehensive and inclusive participation and commenting during the PPP for the above application.

The public participation process has included the following:

- Placement of an advertisement in two (2) newspapers in the area.
- Placement of site notices visible to the public.
- Email and or Post distribution of written notices and a Background Information Document to the current registered and identified potential IAP’s.
- Circulation the draft application report and supporting specialist studies for review by the public as well as relevant authorities for comment.
- A public meeting was conducted on the 27th May 2026.
- All comments received was considered, responded to and incorporated in a comments and response report which forms part of the final report to be submitted to the Competent Authority for final consideration.

All comments received, together with the corresponding responses and supporting communication records, has been incorporated into the final application report and included in the relevant annexures to the submission. Records confirming the public participation process undertaken has been included in the final report under the relevant annexures.

Based on the stakeholder comments received from CER/VEJA and the discussions held during the public open day, the principal issues raised related to the legal applicability of Regulation 12A, the technical feasibility of complying with the Minimum Emission Standards for SO₂, the adequacy of the Atmospheric Impact Report and Community Health Risk Assessment, potential health impacts on surrounding communities, the implications of secondary particulate formation from SO₂, climate change and

decarbonisation commitments, socio-economic considerations, employment impacts, and the alignment of the application with the objectives of the Vaal Triangle Airshed Priority Area Air Quality Management Plan. Stakeholders also requested further clarification regarding previous non-compliance with the 2020 postponement limits, future emission reduction measures, the importation of coke, proposed offset projects, and the long-term operational strategy of the Vanderbijlpark Works. During the public open day, additional questions focused on visible emissions, ongoing technology trials, community health concerns, employment, and the potential impacts of the proposed alternative emission limit on surrounding communities.

All comments, objections and questions received during the public participation process were carefully considered and evaluated. Where appropriate, the specialist studies and supporting reports were reviewed and expanded to provide additional technical information, clarification and supporting evidence. The Motivation Report were revised where necessary to address stakeholder concerns and to ensure that the application reflects the current operational strategy, updated emissions scenarios and latest specialist findings. A comprehensive Comment and Response Report has been prepared, documenting each issue raised together with ArcelorMittal South Africa's detailed response and cross-references to the relevant sections of the final application documentation. The final reports therefore incorporate and address all substantive comments received during the public participation process

In Conclusion

AMSA requests the alternative emission limit until 30 April 2035, subject to periodic review by the Competent Authority.

The proposed alternative emission limit application for the DR Kilns must therefore be considered within the broader objectives of NEM: AQA, including the requirement to balance environmental protection with technically feasible, economically sustainable, and socially responsible industrial operations.

The proposed alternative emission limit applied for at the DR Kilns will allow ArcelorMittal South Africa to continue operations, implementing the broader operational restructuring and optimisation measures currently being undertaken at the Vanderbijlpark Works. While these measures do not rely on dedicated SO₂ reduction technology at the DR Kilns themselves, the revised operational configuration, plant rationalisation measures, and reduced operational capacity of selected legacy units are expected to contribute toward reductions in the overall works wide SO₂ emission load.

Investigations undertaken by ArcelorMittal South Africa have indicated that the installation of dedicated sulphur removal technology required for the DR Kilns to achieve the applicable new plant SO₂ emission standard is currently not considered technically practicable or economically reasonable within the operational and financial context of the Vanderbijlpark Works. The implementation of such technologies would require substantial capital expenditure and ongoing operational costs which may further threaten the long-term operational sustainability of the facility.

Accordingly, the proposed alternative emission limit is considered to represent a more realistic and operationally achievable interim approach while broader operational optimisation measures and future emission reduction opportunities continue to be assessed.

The findings of the specialist studies, (AIR and the HHRA) support the conclusion that the proposed alternative SO₂ emission limit for the DR kilns would not result in a material increase in ambient SO₂ related health risks at the assessed sensitive receptor locations surrounding the Vanderbijlpark Works.

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Annexure B	Air Quality Impact Report
Annexure C	Health Risk Assessment
Annexure D	Public Participation Information
Annexure E	Withdrawal letter

ABBREVIATIONS AND ACRONYMS

AEL	Atmospheric Emissions License
AIR	Atmospheric Impact Report
APPA	Atmospheric Pollution Prevention Act (No. 45 of 1965)
AQIA	Atmospheric Impact Report (AIR)
BID	Background Information Document
BOF	Basic Oxygen Furnaces
CO	Carbon monoxide
DEA	Department of Environmental Affairs
DFFE	Department of Forestry, Fisheries and the Environment
EIA	Environmental Impact Assessment
ESP	Electrostatic Precipitator
GDP	Gross Domestic Product
GN	Government Notice
HPA	Highveld Priority Area
I&APs	Interested and Affected Parties
LED	Local Economic Development
NAAQS	National Ambient Air Quality Standards
NEM: AQa	National Environmental Management: Air Quality Act (No. 39 of 2004)
NEM: WA	National Environmental Management Waste Act (No. 59 of 2008)
NEMA	National Environmental Management Act (No. 107 of 1998)
SAAQIS	South African Air Quality Information System
PM	Particulate Matter
SO ₂	Sulphur Dioxide
H ₂ S	Hydrogen sulphide
NO _x	Oxides of Nitrogen
VTAPA	Vaal Triangle Air-shed Priority Area

Units of Measurement

°C	Degrees Celsius
μ	Micro
g	Gram
g/s	Gram per second
m	Metre
m/s	Metres per second
m ²	Metre squared
m ³	Metre cubed
ppm	Parts per million
kPa	Kilopascal

DEFINITIONS

Ambient Standard	The maximum tolerable concentration of any outdoor air pollutant as set out in the National Ambient Air Quality Standards in terms of Section 9(1) of the NEM: AQA.
Atmospheric Impact Report	In terms of the Minimum Emission Standards an application for postponement must be accompanied by an Atmospheric Impact Report as per Section 30 of NEM: AQA. Regulations Prescribing the Format of the Atmospheric Impact Report (AIR) were published in Government Notice 747 of 2013).
Criteria Pollutants	Section 9 of NEM: AQA provides a mandate for the Minister to identify a national list of pollutants in the ambient environment which present a threat to human health, well-being or the environment, which are referred to in the National Framework for Air Quality Management as " <i>criteria pollutants</i> ". In terms of Section 9, the Minister must establish national standards for ambient air quality in respect of these criteria pollutants. Presently, eight criteria pollutants have been identified, including sulphur dioxide (SO ₂), nitrogen dioxide (NO ₂), ozone (O ₃), carbon monoxide (CO), lead (Pb), particulate matter (PM ₁₀), particulate matter (PM _{2.5}), benzene (C ₆ H ₆). In this document, any pollutant not specified in the National Ambient Air Quality Standards ("NAAQS") is called a "non-criteria pollutant".
Existing Plant	Any plant or process that was legally authorized to operate before 1 April 2010 or any plant where an application for authorisation in terms of the National Environmental Management Act 1998 (Act No.107 of 1998), was made before 1 April 2010.
Existing Plant Standards	The emission standards which existing plants are required to meet. Emission parameters are set for various substances which may be emitted, including, for example, particulate matter, nitrogen oxides and sulphur dioxide.
GN 893	Government Notice No. 893, 22 November 2013, published in terms of Section 21 of the National Environmental Management: Air Quality Act (Act No 39 of 2004) and entitled 'List of Activities which Result in Atmospheric Emissions which have or may have a Significant Detrimental Effect on the Environment, Including Health and Social Conditions, Economic Conditions, Ecological Conditions or Cultural Heritage'. GN 893 repeals the prior publication in terms of Section 21, namely Government Notice No. 248, 31 March 2010. GN 893 deal with aspects including: the identification of activities which result in atmospheric emissions; establishing minimum emissions standards for listed activities; prescribing compliance timeframes by which minimum emissions standards must be achieved; detailing the requirements for applications for postponement of stipulated compliance timeframes.
Listed Activity	In terms of Section 21 of NEM: AQA, the Minister of Water and Environmental Affairs has listed activities that require an atmospheric emissions licence. Listed Activities must comply with prescribed emission standards. The standards are predominantly based on 'point sources', which are single identifiable sources of emissions, with fixed location, including industrial emission stacks.
Minimum Emissions Standards	Prescribed maximum emission limits and the manner in which they must be measured, for specified pollutants. These standards are published in Part 3 of GN 893.
New Plant	Any plant or process where the application for authorisation in terms of the National Environmental Management Act 1998 (Act No.107 of 1998), was made on or after 1 April 2010.
New Plant Standards	The emission standards which existing plants are required to meet, by April 2020, and which new plants have to meet with immediate effect. Emission parameters are set for various substances which may be emitted, including, for example, particulate matter, nitrogen oxides and sulphur dioxide.
Point Source	a single identifiable source and fixed location of atmospheric emission and includes smokestacks.

Point of Compliance	Means any point within the off gas line, where a sample can be taken, from the last vessel closest to the point source of an individual listed activity to the open-end of the point source or in the case of a combination of listed activities sharing a common point source, any point from the last vessel closest to the point source up to the point within the point source prior to the combination/interference from another Listed Activity.
Postponement	A postponement of compliance timeframes for existing plant standards and new plant standards and their associated special arrangements, in terms of Regulations 11 and 12 of GN 893.
Priority Area	means an area declared as such in terms of Section 18 of NEM: AQA.

Additional terms provided for the purpose of clarity in this application:

Alternative Emissions Limits	The standard proposed by ArcelorMittal based on what is considered reasonable and achievable as a consequence of the assessments conducted and which ArcelorMittal proposes as an alternative standard to be incorporated as a licence condition with which it must comply in terms of Section 12A. The alternative emissions limits are specified as ceiling emissions limits or maximum emission concentrations.
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1. INTRODUCTION

ArcelorMittal South Africa is the largest maker of long and flat steel products in Africa, supplying more than 60% of its steel and boasting a presence in 60-plus countries. Products include billets, carbon steel, cold-rolled steel sheets, hot-rolled steel plates, and stainless steel. Its Vanderbijlpark Works plants produce flat steel while its Newcastle and Vereeniging Works turn out long steel products. In January 2025, the closure of the long steel operations was announced, which will lead to more than 3 500 direct job losses. With this change in the company structure in mind, the strategy for the optimisation and improvement of the flat steel operations is critical, to ensure the Vanderbijlpark Operations remain sustainable.

The ArcelorMittal Vanderbijlpark Works, located in the established heavy industrial area (NW7) of Vanderbijlpark has been in operation for more than 80 years. Vanderbijlpark is characterised by a mix of heavy to light industrial operations and activities. Residential areas are scattered throughout with some outlying agricultural holdings on the outskirts of the Vaal. ArcelorMittal is considered synonymous with both Vereeniging and Vanderbijlpark as both operations led to the successful establishment of much needed infrastructure which supported successful economic growth.

The Vanderbijlpark Works falls within the jurisdiction of the Emfuleni Local Municipality as well as the Sedibeng District Municipality. On the 29th September 2023, the Sedibeng District Municipality issued the ArcelorMittal Vanderbijlpark Works with an Atmospheric Emissions License (AEL) (0003/SDM/2012) in terms of Section 41 of (1)(a) of the National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004) in respect of Listed Activity No. 1.4, 3.1, 3.2, 3.3, 4.2, 4.5, 4.6, 4.8, 4.10, 4.12, 4.22, 5.1, 4.11 and 7.2.

Section 7.2 of the AEL (0003/SDM/2012) sets out the maximum emission rates for each point source (under normal working conditions). These emission rates are aligned with the Minimum Emission Standards (MES) which were published by the then Department of Environmental Affairs (DEA) (now the Department of Environmental Affairs, Forestry and Fisheries (DFFE)) in GN 893 as amended, (Listed Activities and associated minimum emission standards identified in terms of Section 21 of NEMAQA).

The MES define maximum allowable emissions to the atmosphere for specific pollutants from specific activities. Existing facilities that were legally operational before 1 April 2010 (prior to the publication of GN893) were required to comply with the MES for existing plants by 1 April 2015, unless otherwise specified or subject to a postponement. Existing plants are then further required to comply with the MES for new plants by 1 April 2020 unless otherwise specified or subject to a postponement. New facilities are required to comply with the MES for new plants immediately.

The ArcelorMittal Vanderbijlpark Works was operational prior to 1 April 2010 and is therefore regarded as “existing plant” in terms of GN 893 as amended,. Part 2, Paragraph 10 of GN893 states that “*Existing plant must comply with minimum emission standards for new plant as contained in Part 3 by 01 April 2020, unless where specified.*”

The postponement application was granted 23rd March 2020 for alternative standards for the following facilities.

- Coke Ovens H₂S – Postponement to achieve 7mg/Nm³ by 31st March 2025 and approval for alternative emission standard of the following.
 - Battery 4 – 40mg/Nm³
 - Battery 5 – 50 mg/Nm³
 - Battery 7 – 70 mg/Nm³
 - Battery 8 – 50 mg/Nm³
 - Battery 9 - 30 mg/Nm³

ArcelorMittal indicated that the H₂S levels at the Coke Ovens are being resolved and does not need further postponement or alternative emissions limits. The H₂S levels at the Coke Ovens therefore does not form part of this application.

- DR Kilns stacks - SO₂ - Postponement to achieve 500 mg/Nm³ by 31st March 2025 and approval for alternative emission standard of the following levels.
 - DR Kilns stack 3 – 800 mg/Nm³
 - DR Kilns stack 4 – 500 mg/Nm³
 - DR Kilns stack 5 – 700 mg/Nm³
 - DR Kilns stack 6 – 750 mg/Nm³

The AEL was varied accordingly, and the alternative limits have been incorporated into the license. ArcelorMittal initially requested the DR Kilns stacks alternative emission limit of 1 700 mg/Nm³, which is the existing plant standard. The alternative emission limits granted in the Postponement approval ranged between 700 mg/Nm³ to 800 mg/Nm³. The actual emissions measured between 2021 and 2025 indicated that the SO₂ emissions varies greatly between 632 mg/Nm³ to 2043 mg/Nm³, depending on operating conditions with regards to input material. On average the emissions measured for all the kilns over the last few years, SO₂ were 1330 mg/Nm³.

Paragraph 12(A) of GN 893 as amended, continues to state that.

- a. *“An existing plant may submit an application regarding a new plant standard to the National Air Quality Officer for consideration if the plant is in compliance with other emission standards but cannot comply with a particular pollutant or pollutants.*
- b. *An application must demonstrate a previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.*
- c. *The National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if:*
 - i. *there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or*
 - ii. *the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard*

ArcelorMittal South Africa's future operational and emissions reduction strategy for the Vanderbijlpark Works is influenced by increasing international and domestic pressure associated with climate change mitigation, carbon reduction commitments, energy efficiency requirements, and the long-term sustainability of integrated steel manufacturing operations.

In response, ArcelorMittal globally announced long-term commitments aimed at progressively reducing greenhouse gas emissions and improving the sustainability of steel manufacturing operations. Within this broader framework, ArcelorMittal South Africa has developed a revised decarbonisation and operational optimisation strategy for the Vanderbijlpark Works focused on a portfolio of high-impact energy efficiency and energy recovery projects aimed at reducing overall greenhouse gas emissions, improving energy utilisation, enhancing operational efficiency, and lowering long-term operating costs.

ArcelorMittal South Africa is pursuing a phased and risk-managed approach toward implementation of future decarbonisation and operational optimisation projects. This includes investigation of strategic partnerships, third-party technical collaboration opportunities, and potential development finance mechanisms aimed at supporting implementation of selected future projects while limiting direct upfront capital exposure and reducing overall project risk.

The revised strategy therefore focuses on the progressive implementation of technically feasible and financially sustainable operational optimisation and emissions reduction measures within the constraints currently applicable to the Vanderbijlpark Works and the broader South African steel sector.

ArcelorMittal Vanderbijlpark Works has developed a strategy to ensure their operations remain sustainable, while also ensuring emission reductions could be achieved. The strategy includes measures to be taken to achieve the goal, which is aimed at reducing the greenhouse gas emissions, as well as reduce the dust (PM), SO₂ and NO_x emissions from the Works.

In order to achieve the required goal, ArcelorMittal must first apply for alternative emission limits at the DR Kilns in terms of SO₂.

ArcelorMittal indicated that the DR Kilns would not be able to comply with the SO₂ emission limit of 500 mg/Nm³ in the foreseeable future. Merely considering the flue-gas flow rates at the kilns (> 800 000 m³/hr), from a BPEO test perspective (as referenced in the 2017 National Framework for Air Quality Management), it is not practicable (see Note 1 below, sourced from the Framework) to install abatement technology to reduce SO₂ emission. The source of SO₂ emissions from the kiln's are as a result of the coal used as input material with Sulphur content that varies between 0.7% - 1.8% with an average of 1.4%. Notice should be taken that for every 1.42 ton of iron ore; 0.8 ton of high Sulphur containing coal is added into the furnace to produce one ton of sponge iron.

Trials were completed to substitute a percentage of high Sulphur containing feed coal with Dolomite with possible SO₂ absorbance properties and assessing coal with lower SO₂. The Dolomite addition did not illustrate notable SO₂ emission reduction and the results of the coal peas with lower Sulphur concentration concluded unfeasible for the Direct reduction application due to low reactivity.

Cognisance should be taken of the revised operational strategy currently being implemented at the Vanderbijlpark Works and the critical role that the Direct Reduction ("DR") kilns continue to play within the integrated ironmaking operations of the facility. The DR kilns remain operationally important to the stability and sustainability of the Vanderbijlpark Works due to their role in supporting blast furnace operations, enabling operational flexibility in iron ore utilisation, reducing coke consumption within the blast furnaces, and contributing toward steam and energy generation within the Works.

Without the continued operation of the DR kilns, the operational and financial sustainability of the Vanderbijlpark Works would be placed under significant pressure, which may materially increase the risk of further large-scale operational curtailment or closure of portions of the facility.

Significant changes have, however, occurred to the previously proposed future operational and infrastructure strategy for the Vanderbijlpark Works. The previously proposed Electric Arc Furnace ("EAF") route has been placed on hold and the previously proposed expansion strategy involving the construction of new coke batteries and associated infrastructure is no longer being pursued due to operational and financial constraints affecting the facility and the broader ArcelorMittal South Africa group.

Similarly, the previously proposed Coke Oven Gas Cleaning Plant and associated sulphur removal infrastructure are no longer considered technically and economically feasible under the revised operational configuration of the Works. Following the shutdown of multiple coke batteries between 2024 and 2025, only Coke Battery 4 remains operational. Under the revised operational configuration, the originally designed purchased gas cleaning plant is substantially oversized relative to the remaining gas volumes and operational requirements. Consequently, ArcelorMittal has resolved not to proceed with completion of the gas cleaning plant project.

The revised operational strategy for the Vanderbijlpark Works therefore focuses on broader operational restructuring, plant rationalisation, reduced coke production capacity, operational optimisation, and the

phased shutdown of selected legacy operational units in order to achieve reductions in the overall SO₂ emission load from the Works.

The scenario assessment undertaken as part of this application demonstrates that measurable reductions in total plant wide SO₂ emissions can still be achieved under the revised operational configuration, even where the DR kilns operate under the proposed alternative SO₂ emission limit of 1 500 mg/Nm³.

Under the future operational scenario incorporating the proposed alternative emission limit for the DR kilns and continued operation of Coke Battery 4, total plant wide SO₂ emissions are estimated to reduce by approximately 6% relative to the baseline scenario and approximately 9% relative to the current operational scenario. Should Coke Battery 4 cease operations in future, further reductions of approximately 15% relative to the baseline scenario and approximately 17% relative to the current operational scenario are predicted.

The proposed operational restructuring measures therefore provide broader plant-wide emission reduction benefits while recognising the operational realities and technical limitations associated with the Direct Reduction kilns. The investigations undertaken by ArcelorMittal South Africa have indicated that achieving compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³ at the DR kilns would require substantial capital-intensive sulphur removal technology and associated operational expenditure which is currently considered technically impracticable and economically unjustifiable within the present operational and financial context of the Vanderbijlpark Works.

The proposed approach accordingly seeks to achieve a balanced outcome through broader operational emission reductions across the Works while allowing for the continued operation of the DR kilns under a technically achievable and operationally sustainable alternative emission limit.

The shutdown of certain plants, have and will result in the reduced emission load emitted.

- Shut down of Coke Oven Battery 6 (2024)
 - Shut down of Coke Oven Battery 7 (2024)
 - Shut down of Coke Oven Battery 8 (2025)
 - Shut down of Coke Oven Battery 9 (2025)
- Changes in process flow and plants to optimise operations.
 - Operate 3 x DR Kilns (2 operated with 1 on standby and maintenance) at alternative emission limits.
 - Operate only 1 Coke Battery (Battery 4) in its current state until 2040, whereafter it will be decommissioned.
 - Import all required coke from outside of South Africa.
- Changes in the previous decarbonisation strategy
 - No longer planning to construct two new Coke Batteries.
 - No longer planning to construct and commission a new Gas Cleaning and Desulphurisation plant.
 - No longer proposes to construct a new Electric Arc Furnace (EAF) and operate only two of the three BOF furnaces.
 - No longer planning to decommission part of the iron making facilities.

Indirect emission reductions

The local offset project which AMSA is currently busy with entail the design of either a transfer station consisting of recycling bays and an area for composting garden waste or a new municipal domestic waste disposal site. The emission reduction, although unquantified, will be that there would be a proper waste

management facility, which is currently lacking in the Emfuleni Municipality area. Waste is being disposed illegally, and waste burning is causing emissions. If proper waste management facilities are in place, the illegal handling of waste could be avoided.

Construction of a waste management facility for the Emfuleni Local Municipality to promote lawful waste handling practices and reduce illegal waste disposal and uncontrolled waste burning activities. The provision of formal waste management infrastructure, including waste transfer, recycling, and disposal facilities, is expected to reduce the occurrence of open waste burning within surrounding communities and informal disposal areas.

Uncontrolled waste burning is a significant source of atmospheric pollutants, including particulate matter (PM₁₀ and PM_{2.5}), sulphur dioxide ("SO₂"), nitrogen oxides ("NOx"), volatile organic compounds ("VOCs"), and other hazardous combustion by-products. The reduction and prevention of illegal waste burning activities would therefore contribute toward improved local ambient air quality and reduced emissions within the broader airshed.

- o Install a new 200 MW Solar Farm.

ArcelorMittal intends to construct a solar farm that can deliver up to 200 MW. In 2022 Eskom emitted 1 671 ktSO₂ while producing 198.3TWh according to Eskom 2022 sustainability report. This results in $(1\ 671\ 000\ \text{tSO}_2 / 198\ 300\ \text{GWh}) = 8.427\ \text{tSO}_2/\text{GWh}$ SO₂ intensity for Eskom. The 200MW solar plant will generate with P95 confidence 509.4GWh/a resulting in $(509.4\text{GWh} \times 0.8427\ \text{tSO}_2/\text{GWh}) = 4\ 292.262\ \text{t/a}$ SO₂ avoidance. Although this avoidance would be at Eskom power stations and might only be a theoretical avoidance (as they will most likely find alternative users), the life cycle footprint of ArcelorMittal would improve, if they implement the solar farm.

Conclusion

An application in in terms of Regulation 12 of GN 893 is therefore made by ArcelorMittal to request an alternative emission standard (new plant standards) for the following.

Table 4: Alternative Emission Standards Proposed

NEMAQA S21 Category	Appliance	Minimum Emission Standards (mg/Nm ³)			Alternative Emission Standard Sought	Time Period
		Pollutant	Existing	New		
Subcategory 4.12: Pre-reduction and Direct Reduction "Production of pre-reduced or metallised ore or pellets using gaseous or solid fuels"	Direct Reduction Kiln Stack 4	Sulphur dioxide (SO ₂)	1 700	500	1 500	1 April 2025 For the next 10 years
	Direct Reduction Kiln Stack 5					
	Direct Reduction Kiln Stack 6					

This report serves as an application in terms of Regulations 12(A) of GN 893 as amended, for the alternative SO₂ emission standard of **1 500 mg/Nm³** for DR Kilns. The report is structured as follows:

- Section 1:** Introduction
- Section 2:** Overview of ArcelorMittal Vanderbijlpark Works (location and industrial process description)
- Section 3:** Legal framework for the S12A Application
- Section 4:** Motivation and Justification for S12A Application
- Section 5:** Summary of Atmospheric Impact Report (AIR) specialist study
- Section 6:** Summary of the Health Risk Assessment specialist study
- Section 7:** Public participation
- Section 8:** Conclusion

2. OVERVIEW OF ARCELORMITTAL VANDERBIJLPARK WORKS

This section contains details of the property on which ArcelorMittal Vanderbijlpark is situated as well as a description of the industrial processes at the operations.

2.1. Property Details

The ArcelorMittal Vanderbijlpark Works is located in Delfos Boulevard in the North-West 7 Industrial Area of Vanderbijlpark and falls within the jurisdiction of the Emfuleni Local Municipality and Sedibeng District Municipality in the Gauteng Province.

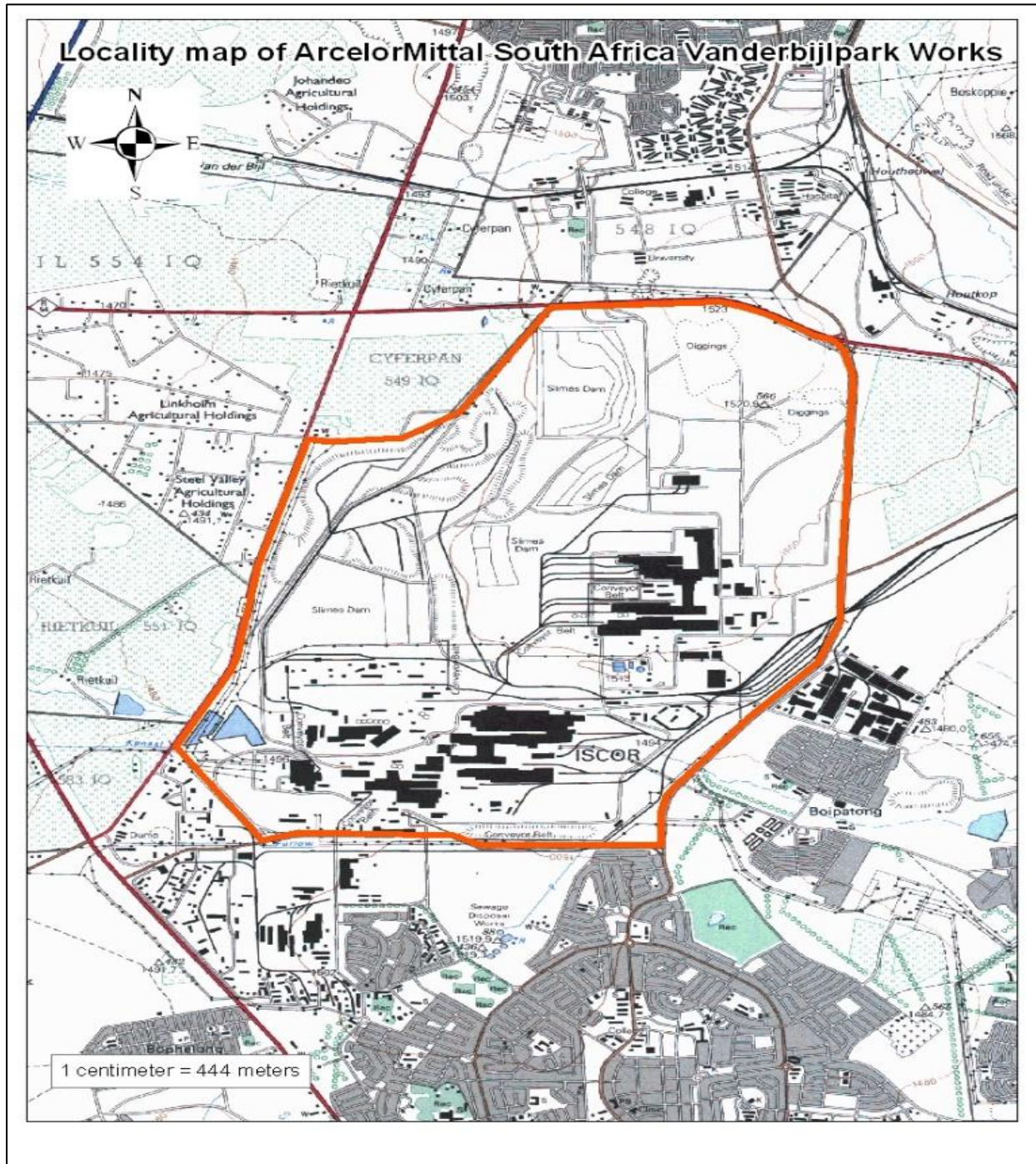


Figure 1: Locality Map ArcelorMittal property boundary

- **Property name:** R/E of Portion 1 of the Farm Vanderbijlpark 550 IQ
- **Physical address:** Delfos Boulevard, Vanderbijlpark

Table 5: Coordinates of Approximate Centre of Operations

Location	Latitude	Longitude
Site Centre	27° 49' 35.27"	26° 39' 2.86"

- **Surveyor general codes**

PROPOSAL	T	0	I	Q	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0
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- **Property Zoning**

The property is zoned as Industrial Type 2 and is utilised for such purposes.

2.2. Location Description and Surrounding Land Use

ArcelorMittal Vanderbijlpark Works is located at Delfos Boulevard, Vanderbijlpark, on the remaining extent of Portion 1 of the Farm Vanderbijlpark 550 IQ.

The Works is an Integrated Steel Manufacturing facility that produces a wide range of flat steel products mainly for the automotive, roofing, packaging and piping sectors. The production of steel products at the Works entails a series of primary and sub processes, each with different input materials. Raw material that are used in the processes include iron ore, coal, scrap metals, alloys, refining materials, and other materials. The ArcelorMittal Vanderbijlpark Works covers approximately 2 450 ha in extent and is zoned as Industrial Type 2, which permits industrial activity and the disposal of residue generated by it.

West of the works are the agricultural small holdings, including Rietkuil, Rosashof, Drakeville, Steel Valley, Linkholm, Lamont Park and Louisrus, the zoning of which are all classified as “*Undetermined*”. The areas to the west as a whole are not suited for crop cultivation due to shallow effective soil depths, high clay content and low mean annual rainfall, although some localised portions in the area have high agricultural potential. Large portions of the land west of the works have been purchased by ArcelorMittal.

To the south and south-east of ArcelorMittal Vanderbijlpark is the NW7 industrial area and further south beyond this area, Bophelong and the town of Vanderbijlpark.

South-east of the works are the residential areas of Vanderbijlpark and Boipatong, and north of this, adjacent to the site is an area zoned for industrial, business and commercial purposes. The remainder of the area north of the site is zoned “Agriculture”, and north and north-east of the site are areas zoned for places of education and brickmaking.

Sensitive receptors surrounding the ArcelorMittal Vanderbijlpark Works as identified in the Air Quality Impact Report compiled by Airshed Planning Professionals include local residential areas, schools, hospitals, old age homes and clinics.

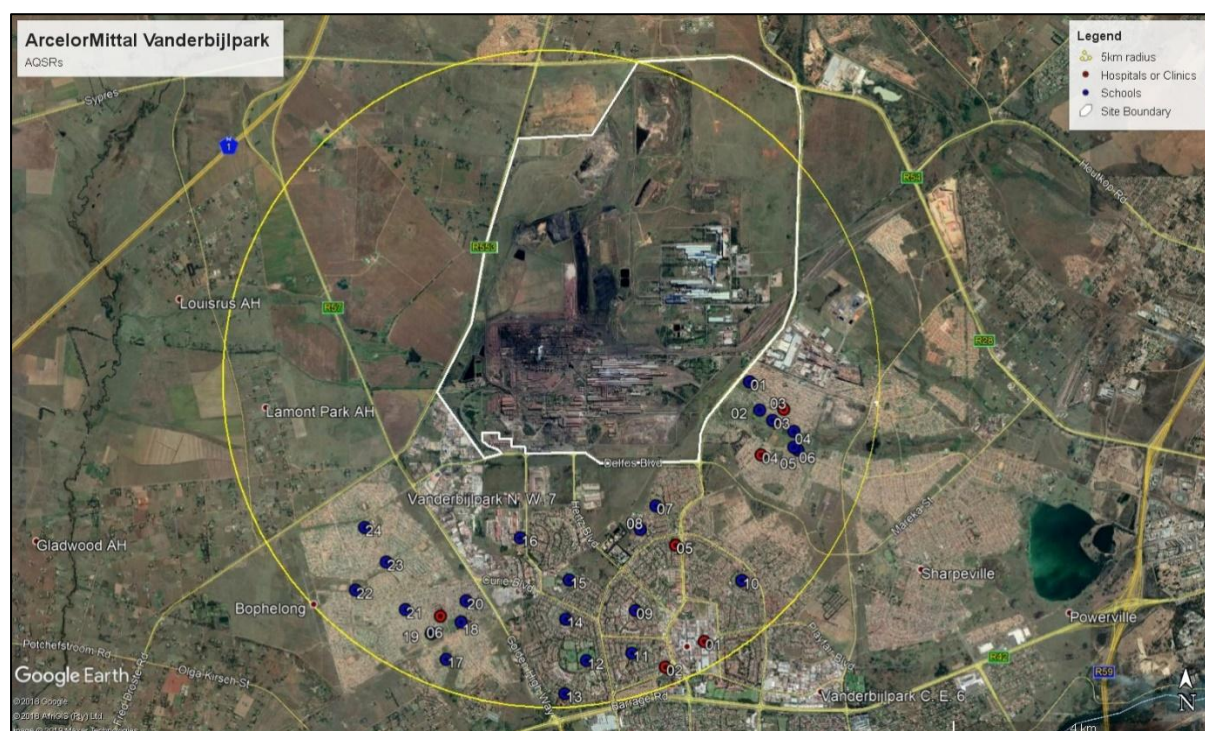


Figure 2: Sensitive receptors within vicinity the ArcelorMittal Vanderbijlpark Works (AQIR, 2026)

Table 6: Receptors identified for assessment of impact as a result of AMSA:VDB operations (AQIR, 2026)

Receptor ID	Receptor Details
Schools	
1	Jet Nteo Secondary School
2	Tshirela Primary School
3	DR Nhlapo Intermediary School
4	Makapane Primary School
5	Mahareng Secondary School
6	Lebohang Secondary School
7	Laerskool Noordhoek
8	Tjokkerland 1 Nursery School
9	Oliver Lodge Primary School
10	Laerskool Oospark
11	Laerskool Frikkie Meyer
12	Hoërskool Vanderbijlpark
13	Die Anker Skool
14	Laerskool Totius
15	Laerskool Hendrik Van Der Bijl
16	El-Shaddai Christian School
17	Emfuleni Primary School
18	Tsolo Secondary School
19	Seeiso Primary School
20	Bophelong Primary School
21	Mqiniswa Primary School
22	Bophelong Secondary School
23	Ikobetseng Primary School

Receptor ID	Receptor Details
24	Bophelong New Secondary School
Hospitals and Clinics	
1	Vaalgate Medical Centre
2	Cormed Hospital, Clinic and Pharmacy
3	Boipatong Clinic
4	Boipatong Clinic - T.B Unit
5	Riverside Woman's Clinic
6	Bophelong Clinic NW2-Vanderbijlpark

2.3. Description of the Industrial Process at ArcelorMittal Vanderbijlpark

ArcelorMittal South Africa, Vanderbijlpark Works is an integrated steel works. The operations are made up of several industrial processes which combine to form the great operations. The first phase of operations is focused on iron making which is then convert to steel which is then used to produce flat steel products. **Figure 3** below represents a summarised layout of the operational flow for the Vanderbijlpark Works.

The “**current scenario**” is presented below, and the emissions inventory has been developed, using 2018 as a baseline. During this period, the production rate and emissions is the most representative of a good production year and therefore more representative than subsequent years. This current scenario therefore represents the worst-case baseline scenario. *Note that DR Kiln 1 and DR Kiln 2 was not operational for the baseline emissions and DR Kiln 4 was operating less than 1% of the time.*

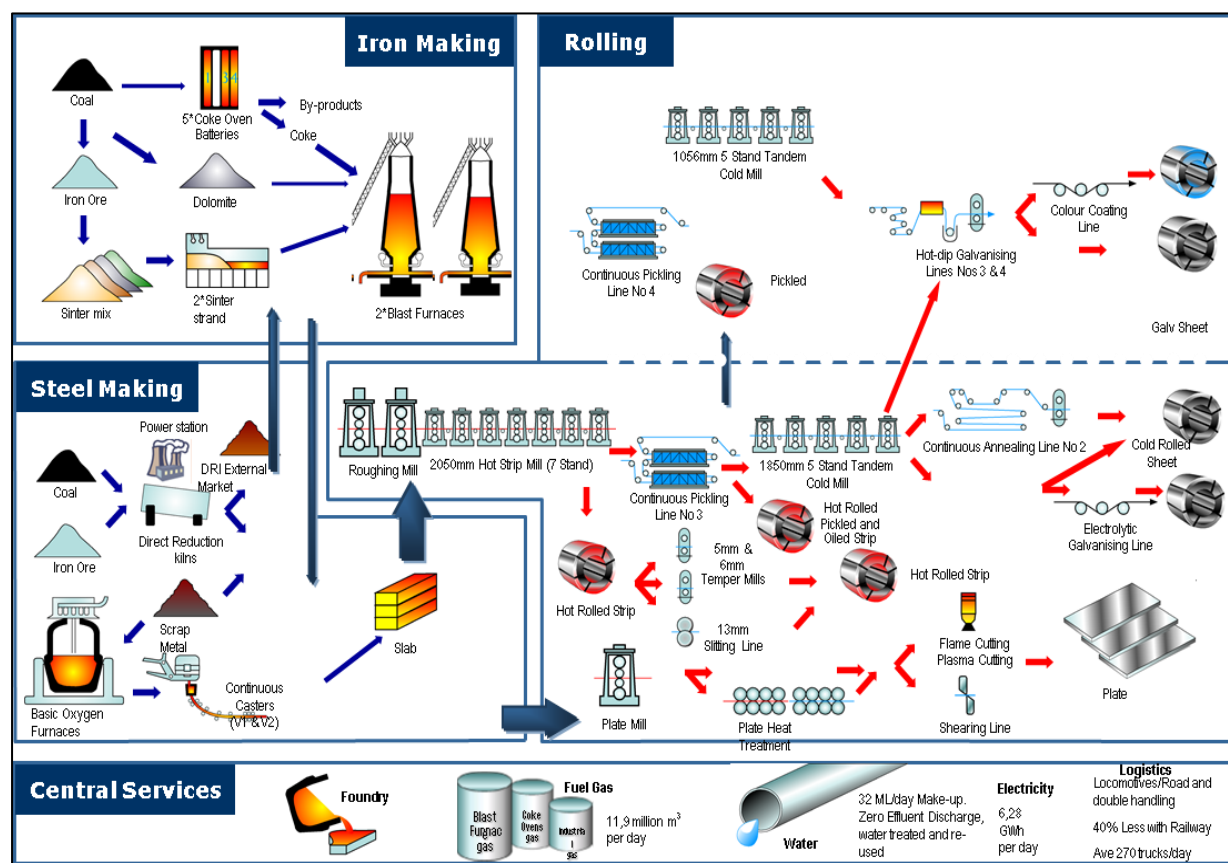


Figure 3: ArcelorMittal Vanderbijlpark Works Process Flow (Current Scenario)

ArcelorMittal previously intended to implement significant changes to the operational configuration of the Vanderbijlpark Works, including the shutdown of selected facilities and the proposed construction of a new Electric Arc Furnace (“EAF”) route, which would have materially altered the overall process flow and emissions profile of the facility. However, this strategy has since materially changed due to operational and financial constraints, and the proposed EAF development is no longer being pursued under the current operational strategy.

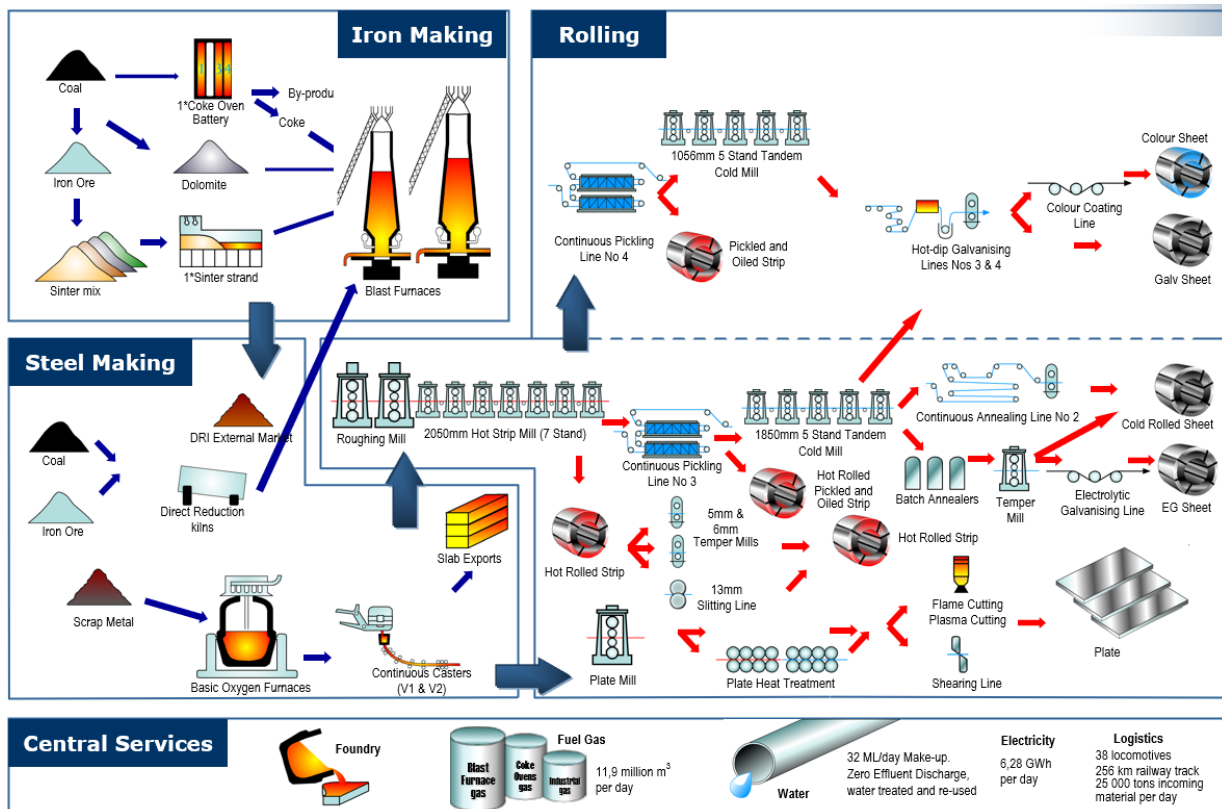


Figure 4: ArcelorMittal Works Process Flow (Future Scenario)

The following measures and changes will be implemented by ArcelorMittal over the next three to five years.

- The shutdown of certain plants, have and will result in the reduced emission load emitted.
 - Shut down of Coke Oven Battery 6 (2024)
 - Shut down of Coke Oven Battery 7 (2024)
 - Shut down of Coke Oven Battery 8 (2026)
 - Shut down of Coke Oven Battery 9 (2026)
- Changes in process flow and plants to optimise operations.
 - Operate 3 x DR Kilns (2 operated with 1 on standby and maintenance) at alternative emission limits.
 - Operate only 1 Coke Battery (Battery 4) in its current state until 2040, whereafter it will be decommissioned.
 - Import all required coke from outside of South Africa.

2.3.1. Phase 1: Iron Making

The iron making business unit consists of four facilities namely the Sinter Plant, Coke Making, Blast Furnaces and Direct Reduction.

- **Sinter Plant**

Sinter is produced through blending fine-sized iron ore, fluxes (limestone and dolomite) and other metallurgical by-products. These raw materials are ignited and heated (using coke and anthracite as a fuel) until they fuse into a solid stable mass known as sinter, which is an important feedstock for the blast furnace. This heating and fusing process takes place on a conveyor-belt type structure known as the sinter strand. Currently Vanderbijlpark Works operates two such strands, Strand A and B. In future, one of the Strands will be shut down and only half the Sinter Making capacity will be operated.

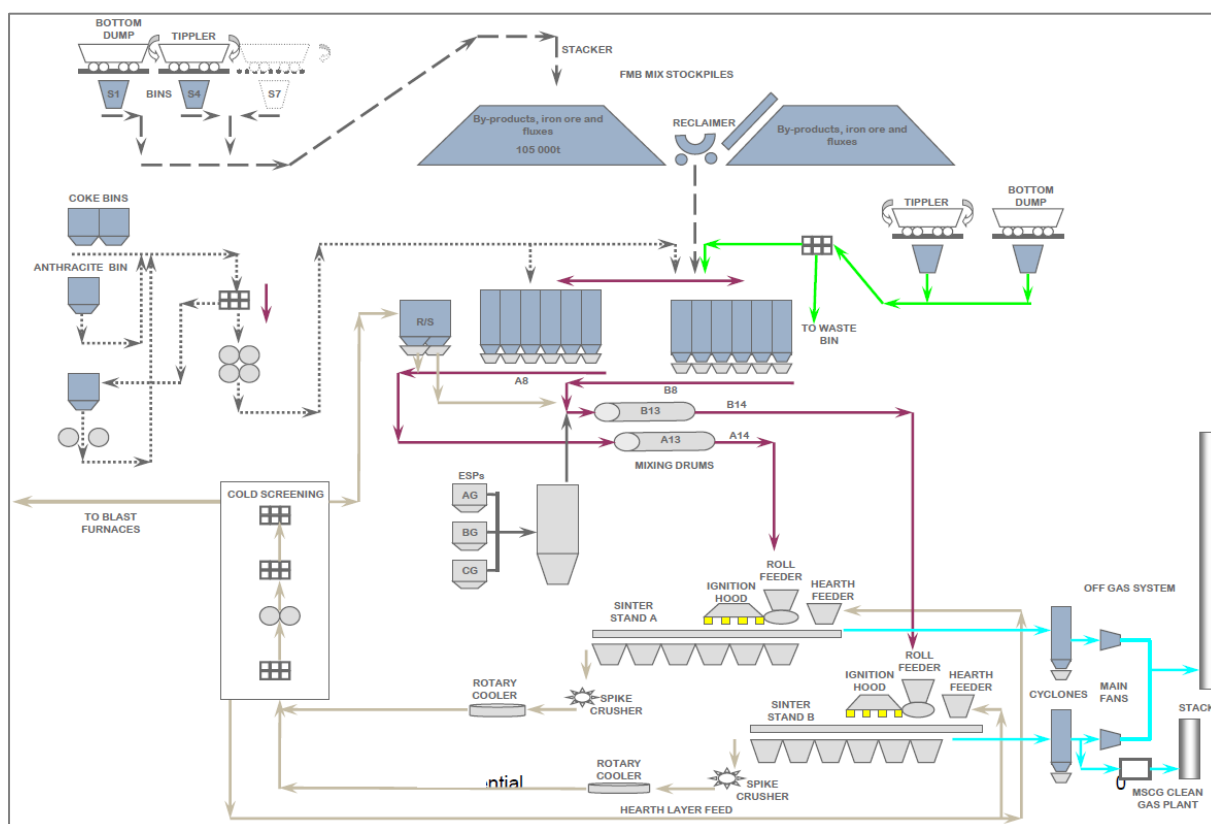


Figure 5: Current Sinter Plant Operations

No changes to the Sinter Operations planned in the future scenario's.

- **Coke batteries**

Coke is used in the blast furnace to chemically reduce iron-oxide to iron metal, it is also however a fuel. Coal is converted to coke by heating coal charged into a battery oven to about 1300°C in an oxygen free environment for 15-21 hours. Vanderbijlpark Works baseline scenario includes the operation of 5 batteries, which supply coke to the blast furnaces on site, with the potential of producing market coke for the ferro-alloy industry depending on the market demand.

Hot crude coke oven gas, which forms as a result of heating of coal in the coke ovens, is cooled down from ~800°C to ~80°C by spraying it with flushing liquor. When the crude coke oven gas cools down a mixture of high boiling compounds condenses out of the gas.

The gas fraction is routed to the gas plant where it is cooled down to remove more condensates, including naphthalene, in the primary coolers, cleaned of fine tar droplets in the electrostatic tar precipitators and hydrogen sulfide (H₂S) and ammonia (NH₃) removal by wet scrubbing.

Between 35 and 40% of the clean coke oven gas is returned to fuel the coke oven batteries, while the remainder is used in other operations within the integrated steel works. The scrubbing liquor used for the H₂S and NH₃ removal is stripped, and the gas cleaned at the Elemental Sulphur plant. The final products from this plant are elemental sulphur that is sold, steam and tail gas that is mixed with the crude coke oven gas before the gas plant.

All condensates emanating from the crude gas and the gas plant are captured in a tar separator. Here the condensates are separated into:

- A heavy tar fraction that is either recycled back into the coke batteries or disposed on a certified site.
- Light tar and naphthalene that is pumped to ArcelorMittal Coke and Chemicals for further processing.
- Flushing liquor that is directed back into the coke ovens for cooling of the crude gas.
- Coal water, which is the excess water, is treated via a gravel filter plant and re-used in the process.

Additional water is routed to a water treatment plant on site where it is treated and recycled. Excess coke oven gas can be flared in Flares 1, 3 and 5. (More detail is provided under the Flares Section.)

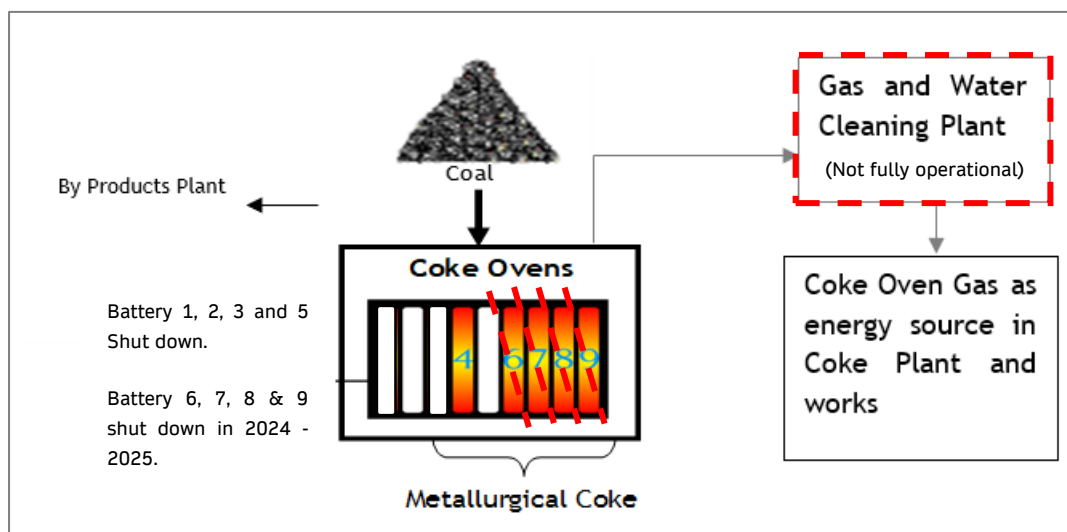


Figure 6: Current Baseline Coke Oven Process

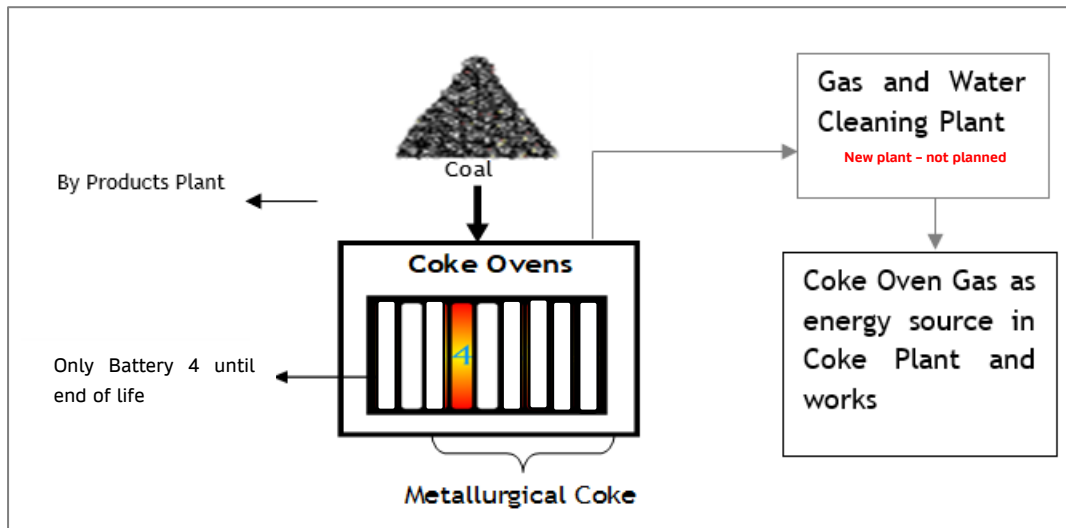


Figure 7: Future Coke Oven Process

Shut down of Battery 6, 7, 8 & 9 shut down in 2024 - 2026. Coke Battery 4 remains the only operational battery until its end of life (planned around 2040), where after all coke will be imported. The Coke Oven gas plant is then no longer planned to be constructed.

- **Blast furnace**

The Blast Furnace (BF) produces Hot Metal (HM) as primary product with slag, BF gas and dust as by-products. Iron lump ore, sinter, Direct Reduced Iron (low or high quality), coke (metallurgical and medium), fine sinter and additives (dolomite/limestone, silica ore, manganese ore and titanium slag as and when needed) are fed to the furnace through a Paul Wurth (PW) Bell Less Top system. Raw materials are weighed in the stock-house and conveyed to the furnace top. The BF is filled with alternating layers of coke and the iron bearing materials (including the additives). Distribution of the raw material in the different layers is controlled and charged via a distribution chute. Hot blast air (up to 1200°C) is introduced to the furnace through a number of tuyères from the blowers, pre-heated by 3 stoves per furnace.

The blast air, which can be enriched with up to 6% oxygen and up to 60 g/Sm³ steam, reacts with the coke and injected pulverized coal to form a reducing gas to reduce lump ore and sinter to HM. The melted materials produce HM and slag that drip down through the coke to the hearth, from where it is removed by tapping through the tap-hole. Separation of HM and slag are being done in the main troughs where the slag, floating on top of the iron, is being skimmed off. HM is tapped at an average temperature of 1470°C and is transported to the Steel Plant in torpedo ladles. BF dust (from the dust catcher and vortex at each furnace) is recycled to the Sinter Plant. BF gas is used for pre-heating the Hot blast air in the stoves during the gas cycle as well as heating purposes in the rest of the Works. At the Pulverized Coal Plant (PCI), coal is pulverized and dried to be used at both Furnaces. The coal size range is controlled to 80% less than 100 microns, and stored on site in two fine coal bins, before being injected into the furnaces along with the hot blast air. Approximately 25 000 t of coal is pulverized per month to replace coke consumption on the furnaces.

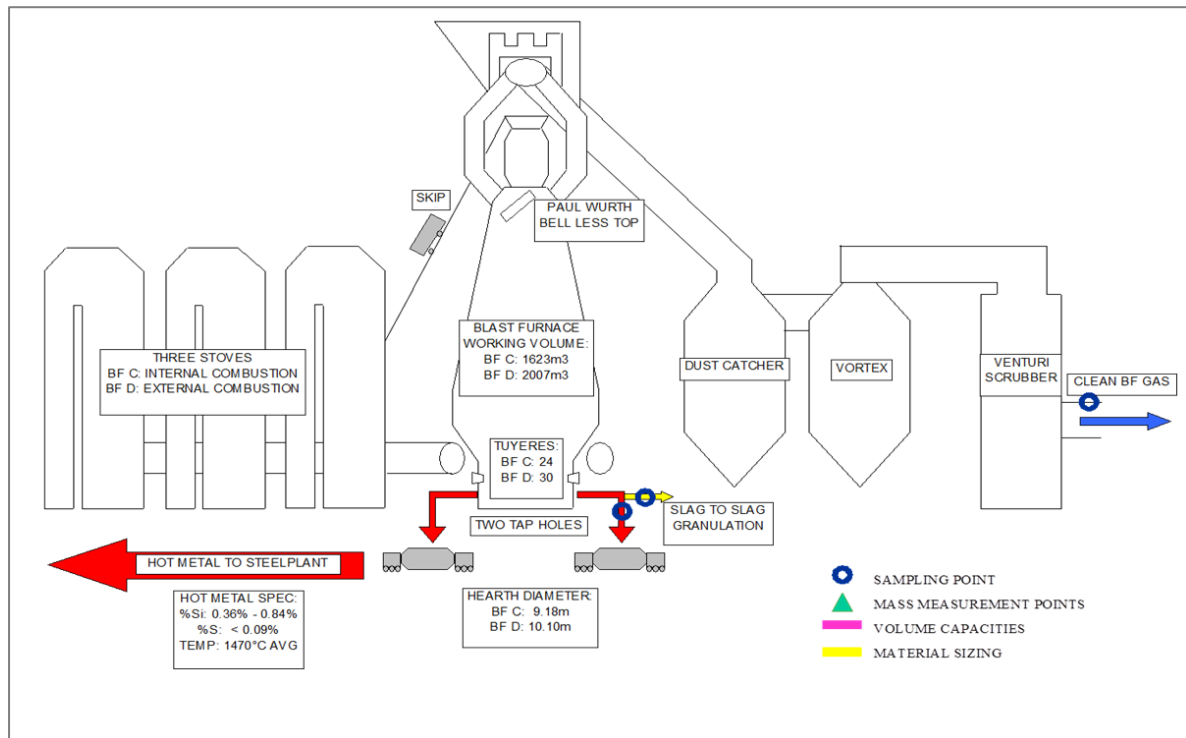


Figure 8: Blast Furnace C and D facility

No changes to the Blast Furnace Operations planned in the future scenario's.

- **Direct Reduction**

The Direct Reduction route is an alternative iron making route, which utilizes coal to reduce the iron ore. At Vanderbijlpark Works, six rotary kilns are used to heat iron ore, coal and additives to produce sponge iron, which is then utilized in the blast furnaces and the steel making plant.

The waste gases from the process are drawn off the process and sent through a waste heat boiler to generate process steam. Dust particles are removed from this waste gas stream in the Electrostatic Precipitator (ESP), before the waste gas is discharged to atmosphere through the main stack. There is an emergency stack situated between the kiln and the boiler for upset conditions.

This serves as a safety device for the boiler, should there be an unplanned boiler outage, and would result in pollution generation for the time that it takes to put the kiln process offline. There are presently 6 kiln / boiler trains in operation.

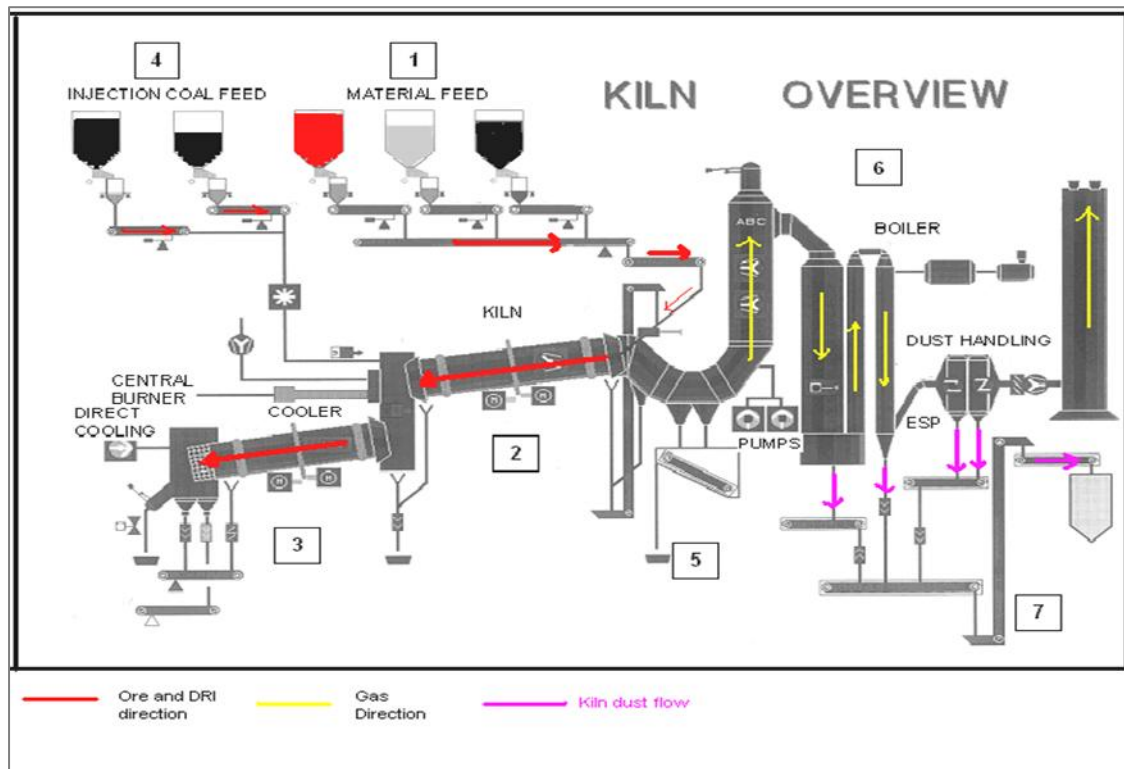


Figure 9: DR Kilns process flow

Shut down 3 of the Kilns permanently and only operate 3 kilns in the future scenario's. (2 operational and 1 on standby)

2.3.2. Phase 2: Steel Making

Steel at Vanderbijlpark Works is produced through the Basic Oxygen Furnace route.

Basic Oxygen steel making involves the conversion of iron from the blast furnace into steel by application of pure oxygen to remove carbon, silicon and other elements, and the addition of fluxes and alloying agents to remove impurities and alter the composition. De-sulphurisation is carried out a pre-treatment of the hot iron. Vanderbijlpark Works operates three furnaces, which operate on molten iron, and scrap. The amount of scrap charged depends on scrap availability, hot metal availability, hot metal chemistry, final steel quality etc. Pure oxygen is then top blown; during the process carbon is oxidized and released as carbon monoxide and carbon dioxide. Silicon, manganese and phosphorus are oxidized and captured in the slag. Further refining of liquid steel chemistry happens in a ladle furnace.

After the refining in the secondary metallurgical process (Ladle Furnaces and RH degasser) the liquid steel is cast into the continuous casters (V1 and V2) and cut into slabs.

Hot Metal Handling

- Hot metal is transported in Torpedo cars on rail from the Blast Furnace to the Hot Metal handling area.
- Hot metal is poured from the Torpedo into Hot Metal ladles and transported with 250T overhead (OH) crane to the Desulphurization plants. The Desulphed Hot metal is weighed again and charged into the Furnace with overhead cranes after scrap is charged into the BOF vessel.

Basic Oxygen Furnace (BOF)

- In the BOF the Hot metal is converted to steel by use of oxygen lance, raw material and flux additions.
- A sub lance is used to verify correct steel chemical analysis and temperature.

Secondary metallurgy

- At the Ladle furnaces (LF1,2,3) the received steel is trimmed to the correct steel grade, requested caster temperature at the right time.
- Some steel grades go to the RH for further refinement to produce ultra-low carbon steel.

Continuous caster

- At the caster the liquid steel is casted into a steel slab with fixed thickness of 240 mm and widths from 960 to 1980 mm
- In the casting process the slab is straightened, solidified and cut into predefined slab lengths.
- Cut slabs are removed by OH cranes with grabs and cooled down naturally or forced cooled with water in the BWG dam.

Slab yard

- At the slab yards the slabs are cooled down and checked and trimmed to correct customer orders.
- From here slabs are transported by rail to the mills for further processing.

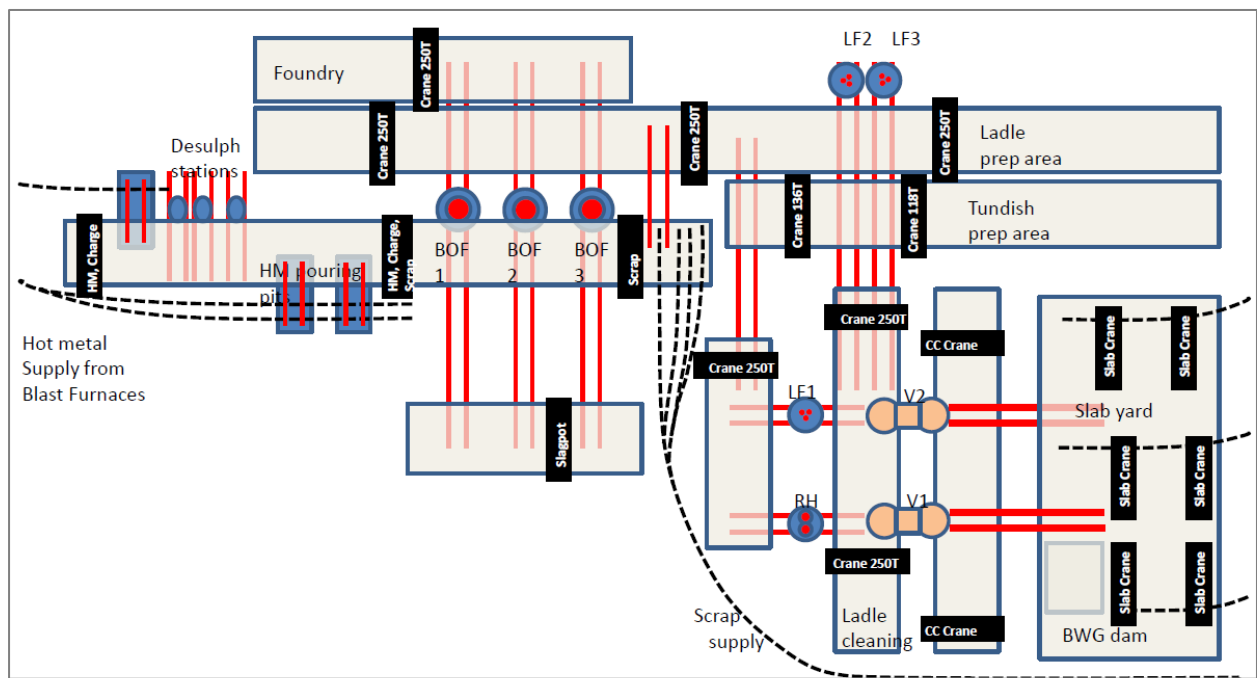


Figure 10: Basic Oxygen Furnace operations

• Rolling Mills

The Rolling Business Unit is divided into two, namely hot rolling and cold rolling.

Hot rolling converts the shape and metallurgical properties of the steel slab by rolling the hot metal repeatedly between electrically powered rollers into coils.

The hot rolled products are further processed in the cold rolling mills, which involves pickling, annealing, tempering and coating.

The rolling facilities are divided into the North Works and the South Works.

Hot rolling consists of a Plate Mill in the South Works and a Hot Strip Mill in the North Works.

- At the Hot Strip Mill (North) slabs are reheated in four (4) Reheating Furnaces (3 pusher type and 1 walking beam type). It further consists of a 2-stand close-coupled tandem reversing Roughing Mill with four attached Edgers; 7-Stand Finishing Mill; 3 Coilers, and a coil handling system.
- The Plate Mill in the South Works has two Reheating Furnaces that use Coke Oven Gas as fuel. After reheating the thick plates, they are rolled in a Four-high Reversing mill. After cooling and cutting (plasma and flame cutting) it can be directed for metallurgical treatment (in order to obtain more hardness and tensile strength) in the Plate Treatment Plant (PTP Plant) that consists of two (2) heat treatment furnaces that consumes Natural Gas. It can also then be directed through the paint booth. The paint booth applies a high-quality water-based primer on the plate top and bottom surface.

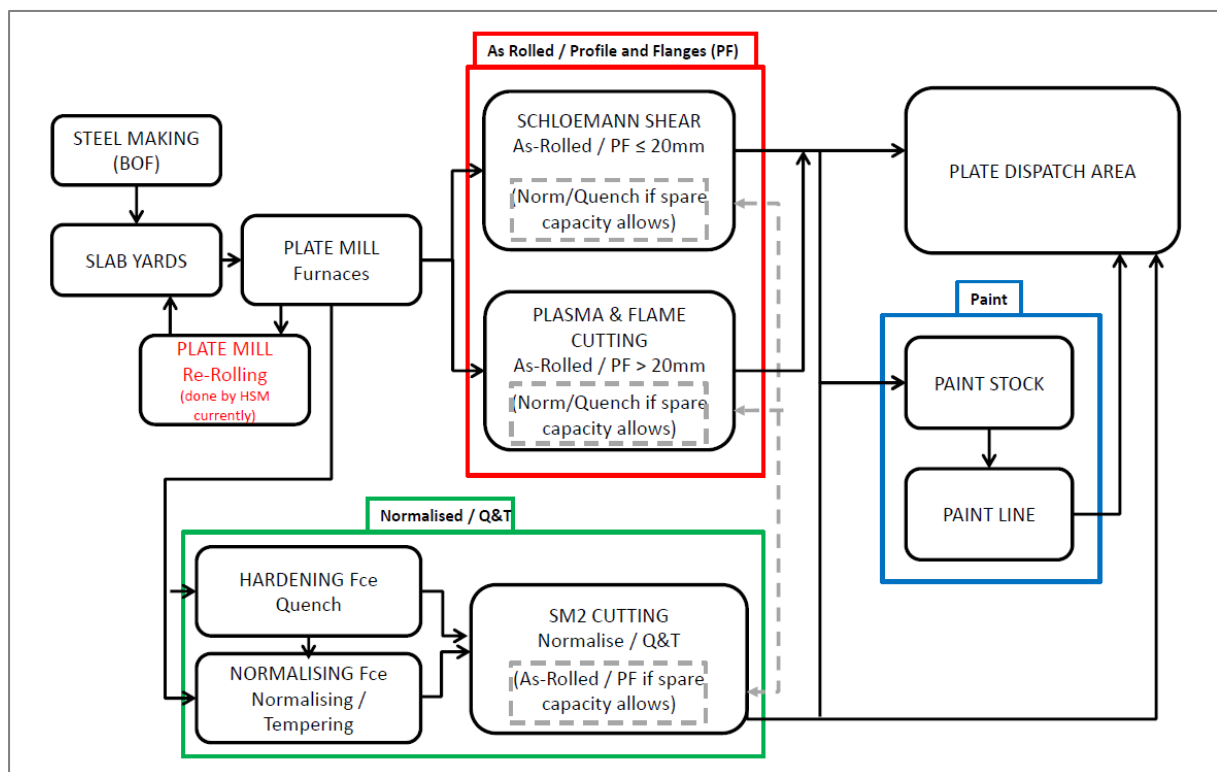


Figure 11: Rolling Mills process flow

- The Cold Mills South consists of the following plants;
 - Pickling Line (Pickler # 4)
 - 5 Stand Tandem Cold Mills South
 - Continuous Annealing Line No 1
 - Cleaning Line
 - BA South (Batch Annealers)

- Twin Stand Temper Mill
- Tin line
- Single Stand Temper Mill
- DWI Line
- Galvanising Line # 3
- Galvanising Line #5
- Paint line / Colour Coating Line
- Coil Preparation plant #2
- Littel Shear Line

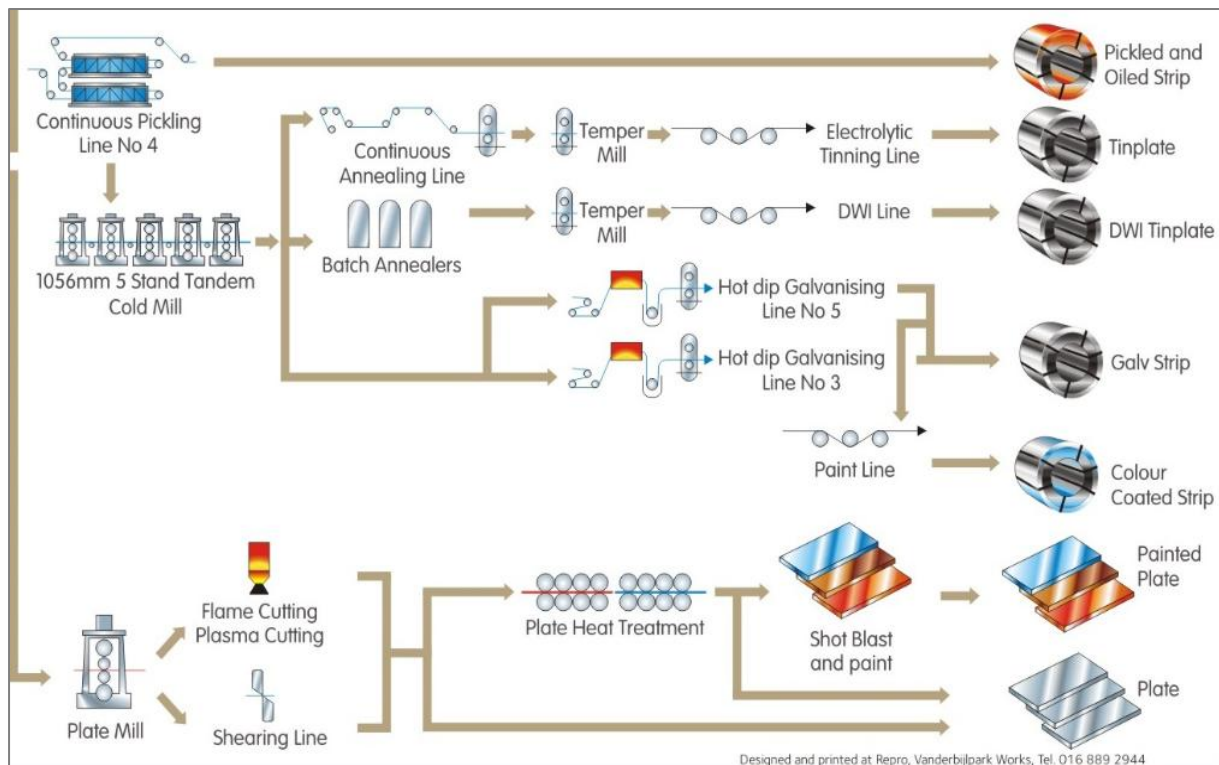


Figure 12: Cold Mills process flow

- The Cold Mills North consists of the following plants;
 - Pickle Line (Pickler # 3)
 - 5 Stand Tandem Cold Mills North
 - Capl #2
 - Galvanising Line # 4
 - Colour Coating Line
 - BA BH (Batch Annealers)
 - Temper Mill North and
 - Electro Galvanising Line
 - Reclamation Line
 - Inspection Line
 - Tension Leveler
 - CAPL Conversion – Galv line

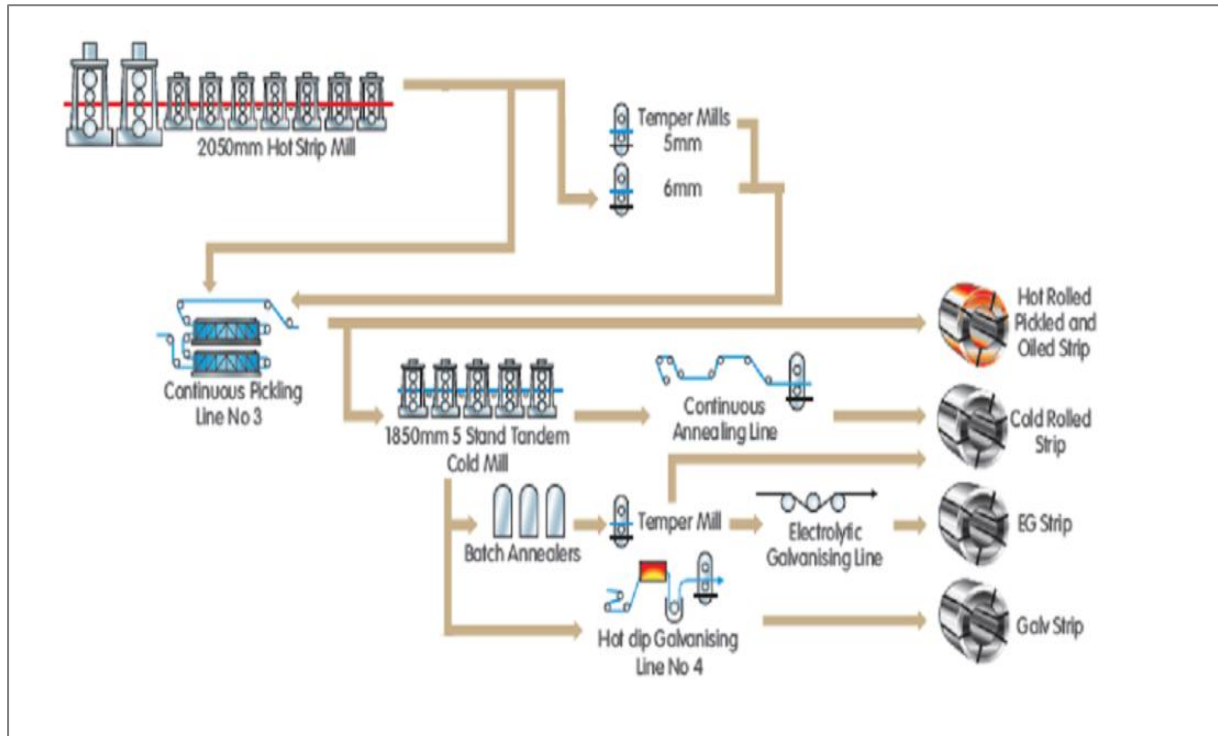


Figure 13: Hot rolling and Cold Rolling North

- **Foundry > 9 tons and Foundry < 9 tons**

Foundry operations involve production of near shape castings in moulds made from resin- bonded silica and chrome sand. Molten steel or iron is poured into the moulds built in either pits or weld-fabricated steel boxes. After solidification and cooling of the metal, the sand is removed from the castings through a process called stripping. Fettling operation involves cleaning of castings through arc-air and grinding.

Ferrous Foundry is made up of two main production sections:

- >9 Ton Section and
- <9 Ton Section.

The >9 ton section is situated in the Basic Oxygen steel plant area from where its liquid steel supply is sourced. The <9 ton section is situated close to the Blast Furnace D plant and has a small induction furnace to melt scrap metal.

Moulding in this section is done in steel boxes utilizing sand recycled from >9Ton Section. Metal for casting in this section comes from a twin 8 ton Induction furnace. Casting of cast iron jobs is made from torpedo pig iron from Blast Furnaces C or D.

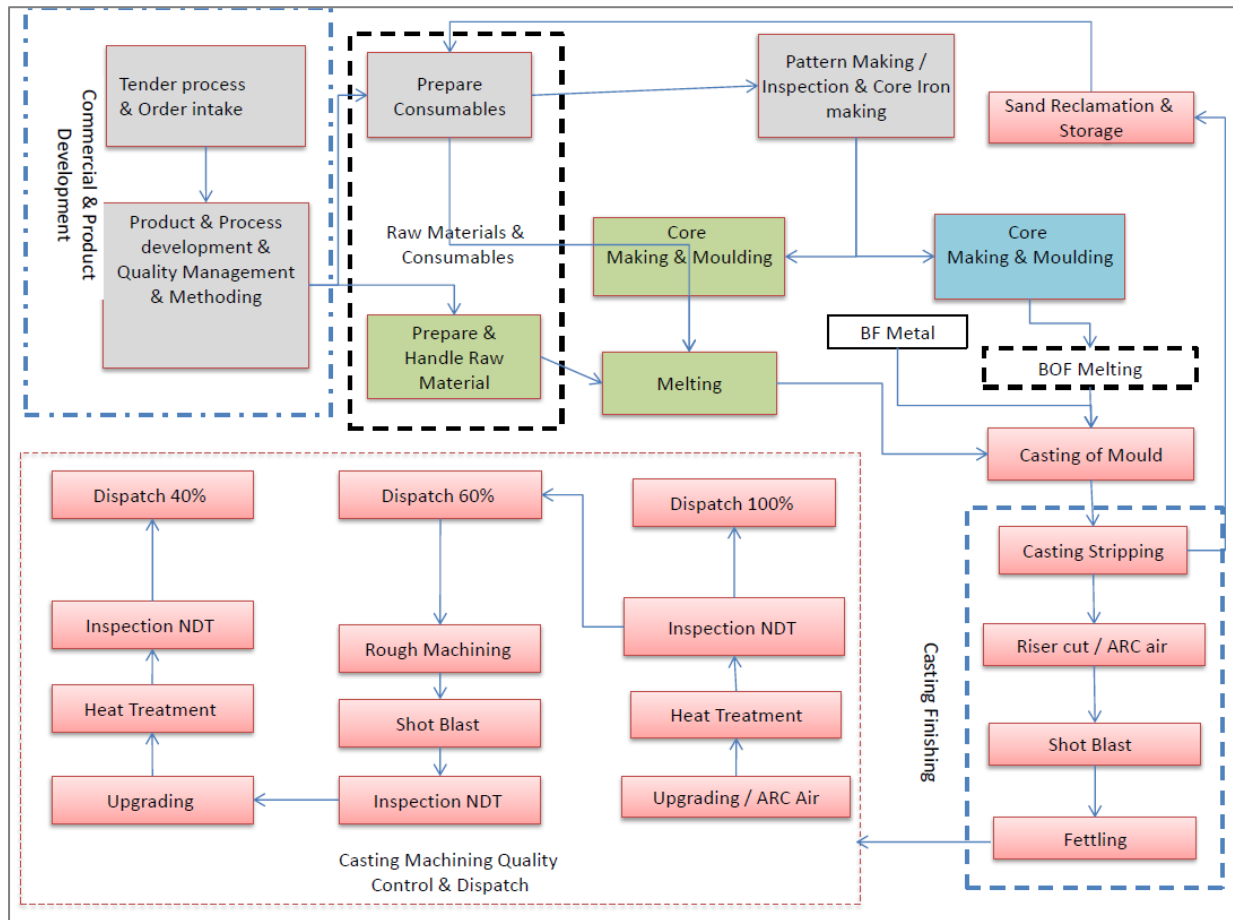


Figure 14: Foundry process flow

- Flares**

Process gas is generated as a by-product from the Basic Oxygen Furnaces (BOF), Coke Ovens and the Blast Furnace operations. The gas serves as a fuel source in various processes on site and for energy generation. The surplus gas which is not utilized is flared. Flaring of gas is dependent on the difference between production and consumption rates.

In the future scenario – once the coke ovens are no longer operational, there will not be any coke oven gas to flare.

- Power Generation**

Steam generation: High pressure (HP) boiler house

There are currently 4 gas fired boilers in operation. The boilers generate steam at 30 Bar, with the capacity to de-superheat to 16 Bar, should the Direct Reduction plant be unable to meet the required demand.

These boilers consume internally produced Blast Furnace Gas and Coke Oven Gas.

The boiler flue gas is emitted from 3 common induced-draft stacks.

5 MW power generation

Steam at 30 Bar, from the HP boiler house, is used to generate power at this machine. This machine generally runs at a constant load, the power being fed into the internal 88 kV network.

30 MW power generation

Steam at 30 Bar, from the HP boiler house, is used to generate power at this machine. This machine is used to take up the fluctuation in available gas, and so is run at varying load conditions, the power being fed into the internal 132 kV network.

40 MW power generation

The Direct Reduction 40 MW turbine / generator (TG) set was installed in order to utilize steam production from waste heat generated by DR Kilns 5 and 6. A gas-fired boiler is also present to enable the use of internally available excess gas (BF and CO gas) to supplement steam supply. The gas-fired boiler utilizes internally generated excess gas (BF and CO gas) to supplement steam supply to the turbine.

Not all boilers on site fall within the ambit of the Atmospheric Emissions License requirements due to capacity.

In the future scenario – once the coke ovens are no longer operational, there will not be any coke oven gas to use in the boilers, thereby reducing the emissions.

Cold blast air generation

Cold blast air is generated from two sources, namely an axial compressor or 5 radial compressors, all electrically driven.

Compressed air generation

This is for various process requirements on site and includes pulverised coal injection (PCI) transport air. This air is generated from two integral gear type compressors which are electrically driven.

During planned and un-planned start-up and shut-down of gas-fired processes (i.e. Boilers, reheating furnaces etc.) the lines are purged which results in small volumes of gas being vented to the atmosphere for short periods of time, as per safe practice.

- **Acid Regeneration Plant**

Spent Pickle Liquor is brought in from Pickling Line #3 and #4 and regenerated to 16% hydrochloric acid using a fluidized bed reactor (Lurgi technology). Iron oxide is produced as a by-product and sold into the market. The regenerated acid is reused at the pickling lines. There are three parallel reactors.

The reactors are gas fired, using natural gas. The hydrochloric acid (HCl) produced in the reactor is scrubbed in a scrubber using water to produce a 16% HCl. The flue gas, together with the scrubbed gas is released into the air through a stack (each reactor has its own stack).

- **Recycling of co-products**

In promotion of the waste management hierarchy, which endorses the principle of “disposal as the last resort”, Vanderbijlpark Works has implemented various co-product recycling initiatives to re-use iron- and carbon- rich material emanating from, inter alia, abatement equipment in the iron and steel making processes. Further recycling potential has been identified through the installation of a proposed briquetting plant which will consolidate co-products from different sources for input in internal production processes.

• The Tar Plant

Crude tar from the ArcelorMittal Vanderbijlpark, Newcastle and Pretoria Works is blended and fed into a Tar Distillation Plant where Pitch, Light Oil, Refined Chemical Oil (RCO), Heavy Oil and Heavy Light Creosote Oil are produced.

The RCO is fed to the Solvent Plant where Coal Tar Naphtha and 60/70 Oil is produced. The 60/70 Oil is in turn fed into the Naphthalene plant, where Naphthalene and Naphtha Still Residue is produced. Various blended products, such as creosote and Black Paint are produced by blending various oils and/or pitch.

The distillation columns are heated using gas fired (natural gas) furnaces. There are 5 of these furnaces. The flue gas is released into the air through stacks.

Final product tanks are heated using a thermal oil system. Gas is used to heat up the thermal oil in gas (natural gas) fired furnaces and the thermal oil is pumped to the tanks through heating coils. The flue gas is released into the air through stacks.

In the blending area, raw materials as well as final products are blended and stored. The high temperature tanks have fume scrubber systems. Fume Scrubber #1 is used for hot oil tanks, while Fume Scrubber #2 is used for pitch tanks.

Pitch can be processed in the

- Pitch Heat Treating Plant – emissions from this process are vented through F103 and VT1 or
- Pitch Solidification Plant – emissions from this process are vented through FS3 with the new thermal oxidizer the above mentioned fumes will be mitigated

Some of the pitch can be solidified using a flaker. The vapour from this system is scrubbed in Fume scrubber #3. The vacuum systems as well as pressure-relieve systems of various distillation columns are tied in a Vent Pot (VT1) which is also a fume scrubbing system.

The Volatile Organic Compounds (VOC) Abatement system at the Tar Plant has been installed to mitigate VOC emissions emanating from various sources (including raw tar tanks, fume scrubbers and vent pots) by means of a regenerative thermal oxidizer.

In the future scenario – once the coke ovens are no longer operational, there will not be a requirement for the Tar Plant as the by-product will not be generated.

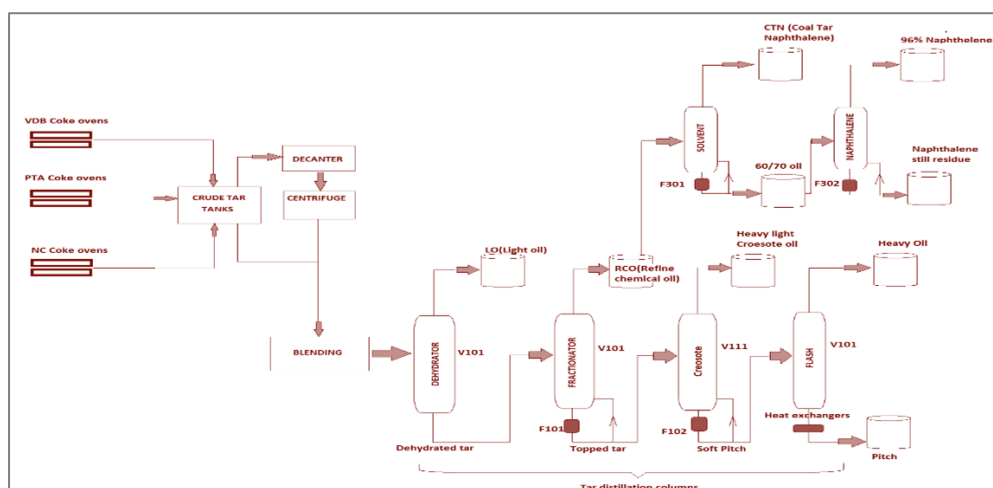


Figure 15: Tar Plant process flow

3. LEGAL FRAMEWORK FOR THE SECTION 12A APPLICATION

3.1. National Framework for Air Quality Management in the Republic of South Africa (2017) (Dated 28 October 2018).

The National Framework for Air Quality Management in the Republic of South Africa, published in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"), provides the overarching framework for the implementation of air quality management within South Africa. The Framework establishes the mechanisms, systems, procedures, norms, and standards required to promote integrated air quality management through pollution prevention, emissions minimisation, and impact management within the receiving environment.

The National Framework recognises that air quality management requires a balanced approach that considers technical feasibility, environmental protection, operational realities, and socio-economic sustainability. The Framework further promotes the implementation of Best Practicable Environmental Options ("BPEO") when evaluating emission reduction interventions and associated compliance strategies.

Appendix 1, Section 5.4.3.4 of the National Framework, titled "Standard-setting process for listed activities", provides the framework under which applications relating to alternative emission limits, postponements, or suspension mechanisms associated with compliance timeframes may be considered by the relevant authorities.

3.2. Listed Activities and Associated Minimum Emission Standards Identified in Terms of Section 21 of NEMAQA

The Listed Activities and Associated Minimum Emission Standards ("MES"), published in terms of Section 21 of NEM:AQA, establish emission standards applicable to listed industrial activities requiring Atmospheric Emission Licences ("AELs").

Paragraph 12A of Government Notice 893 (as amended) provides a mechanism through which an existing plant may apply to the National Air Quality Officer for an alternative emission limit associated with a new plant standard under specific circumstances.

Paragraph 12A,

- a) *An existing plant may submit an application regarding a new plant standard to the National Air Quality Officer for consideration if the plant is in compliance with other emission standards but cannot comply with a particular pollutant or pollutants.*
- b) *An application must demonstrate a previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.*
- c) *The National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if:*
 - i. *there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or*
 - ii. *the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard.*

In terms of Paragraph 12A:

- an existing plant may submit an application regarding a new plant standard where the plant complies with the remaining applicable emission standards but cannot comply with a particular pollutant or pollutants;
- the application must demonstrate previous emission reduction efforts, measures implemented, and direct investments undertaken toward achieving compliance with the relevant new plant standards; and
- the National Air Quality Officer, following consultation with the Licensing Authority, may grant an alternative emission limit or emission load where:
 - there is material compliance with the applicable National Ambient Air Quality Standards (“NAAQS”) for the pollutant concerned; or
 - the Atmospheric Impact Report (“AIR”) demonstrates that no material increased health risk will occur where no ambient standard exists.

This application has accordingly been submitted in terms of Paragraph 12A of Government Notice 893 (as amended) in relation to the applicable new plant SO₂ emission standard associated with the Direct Reduction (“DR”) Kilns at the ArcelorMittal South Africa Vanderbijlpark Works.

3.3. National Environmental Management: Air Quality Act (No. 39 of 2004)

The National Environmental Management: Air Quality Act, 2004 (“NEM:AQA”) came into operation as the primary legislative framework regulating air quality management and atmospheric emissions within South Africa. The Atmospheric Pollution Prevention Act, 1965 (“APPA”) was repealed through Section 60 of NEM:AQA with effect from 1 April 2010.

The objective of NEM:AQA includes:

- *to protect the environment by providing reasonable measures for –*
- *the protection and enhancement of the quality of air in the Republic;*
- *the prevention of air pollution and ecological degradation; and*
- *securing ecologically sustainable development while promoting justifiable economic and social development.*

The proposed alternative emission limits applied for at the DR Kilns will allow ArcelorMittal South Africa to continue implementing the broader operational optimisation and restructuring measures currently planned for the Vanderbijlpark Works. While these measures do not rely on dedicated SO₂ reduction at the DR Kilns themselves, the revised operational configuration and rationalisation of certain plant operations are expected to contribute toward reductions in overall works wide SO₂ emission loads from selected sources across the facility. Additional operational benefits are also anticipated through improved process efficiency and reduced emissions from certain operational areas of the Works.

ArcelorMittal’s investigations have indicated that the installation of dedicated abatement technology required for the DR Kilns to achieve the applicable new plant MES for SO₂ is currently not considered technically and economically reasonable within the present operational and financial context of the facility. The implementation of such technologies would require substantial capital expenditure and operational costs, which may place the long-term sustainability of the Vanderbijlpark Works at further risk. Accordingly, the proposed alternative emission limit is considered a more realistic and achievable interim

approach while broader operational optimisation measures and longer-term emission reduction solutions continue to be assessed and developed. The benefits of the investments into the future Strategy, will result in the overall SO₂ load reduction.

- **NEMAQA, Section 21: Listing of Activities**

Section 21 of NEM: AQA states that The Minister must, or the MEC may;

- a) *"Publish a list of activities which result in atmospheric emissions and which the Minister or MEC reasonably believes have or may have a significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage"*

- **NEMAQA, Section 22: Consequences of Listing**

Section 22 of NEMAQA states that *"No person may without a provisional atmospheric emission licence, or an atmospheric emission licence conduct an activity listed on the national list anywhere in the Republic"*

- **NEMAQA, Section 61: Transitional Arrangements in Respect of Registration Certificates Issued in terms of the APPA**

Section 61 of NEMAQA was included as a transitional arrangement to allow legally operational facilities to apply for authorisation in terms of the newly applicable regulations.

Section 61 (2)(a) of NEM: AQA stipulates that *"Despite the repeal of the APPA, a registration certificate issued in terms of that APPA and which was a valid certificate immediately before the date on which section 60 took effect, continues to be valid for a period of four years from that date, subject to paragraph (d)."*

Section 61 (2)(d)(ii) further states that *"If during the four-year period referred to in paragraph (a) an atmospheric emission licence is issued to the holder of a registration certificate following an application for renewal in terms of paragraph (c), the certificate expires on the date of issue of the licence."*

In terms of Section 61(2)(a), registration certificates issued under APPA remained valid for a transitional period following repeal of the APPA, subject to renewal and replacement through the Atmospheric Emission Licensing system established under NEM: AQA.

ArcelorMittal South Africa accordingly applied for and was granted an Atmospheric Emission Licence for the Vanderbijlpark Works by the Sedibeng District Municipality on 21 February 2012 under AEL Reference Number 0003/SDM/2012, replacing the previous APPA Registration Certificate. The AEL has subsequently been renewed, including the current renewed licence issued in September 2023 and valid until September 2028. NEM: AQA

Section 21 Listed Activities and Associated Minimum Emission Standards

The first set of Listed Activities and MES were published on the 31st March 2010 in GN 248 for which an AEL had to be obtained. GN 248 was replaced by GN 893 on the 22nd of November 2013 (as amended by GN 551 on the 12th June 2015 and GN 1207 on the 31st October 2018).

The AEL as issued to ArcelorMittal Vanderbijlpark Works by the Sedibeng District Municipality on the 21st February 2012 and renewed on the 28th September 2018 and 29th September 2023. The AEL in its current state authorises the undertaking of the following activities;

Category 1: Combustion Installations

- **Subcategory 1.4: Gas Combustion Installations**

Description	Gas combustion (including gas turbines burning natural gas) used primarily for steam raising or electricity generation.		
Application	All installations with design capacity equal to or greater than 50 MW heat input per unit, based on the lower calorific value of the fuel used.		
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 3% O ₂ , 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	10
		Existing	10
Sulphur dioxide	SO ₂	New	400
		Existing	500
Oxides of nitrogen	NO _x expressed as NO ₂	New	50
		Existing	300

Category 3: Carbonization and Coal Gasification

- **Subcategory 3.1: Combustion Installations**

Description	Combustion installations not used primarily for steam raising or electricity generation.		
Application	All combustion installations (except test or experimental installations).		
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 10% O ₂ , 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	50
		Existing	100
Sulphur dioxide	SO ₂	New	700
		Existing	2000
Oxides of nitrogen	NO _x expressed as NO ₂	New	40
		Existing	90

- **Subcategory 3.2: Coke Production**

Description	Coke production and by-product recovery.		
Application	All installations.		
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Hydrogen sulphide	H ₂ S	New	7
		Existing	10

- **Subcategory 3.3: Tar Processes**

Description	Processes in which tar, creosote or any other product of distillation of tar is distilled or is heated in any manufacturing process.		
Application	All installations.		
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Total Volatile Organic Compounds	VOC	New	130
		Existing	250

Category 4: Metallurgical Industry

• Subcategory 4.2: Combustion Installations

Description		Combustion installations not used for primarily for steam raising and electricity generation (except drying).	
Application		All combustion installations (except test or experimental).	
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	50
		Existing	100
Sulphur dioxide	SO ₂	New	500
		Existing	500
Oxides of nitrogen	NO _x expressed as NO ₂	New	500
		Existing	2000

• Subcategory 4.5: Sinter Plants

Description		Sinter plants for agglomeration of fine ores using a heating process, including sinter cooling where applicable.	
Application		All installations.	
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	50
		Existing	100
Sulphur dioxide	SO ₂	New	500
		Existing	1000
Oxides of nitrogen	NO _x expressed as NO ₂	New	700
		Existing	1200

• Subcategory 4.8: Blast Furnaces

Description		Blast furnace operations.	
Application		All installations.	
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	30
		Existing	100
Sulphur dioxide	SO ₂	New	500
		Existing	500
Oxides of nitrogen	NO _x expressed as NO ₂	New	500
		Existing	500

• Subcategory 4.10: Foundries

Description		Production and or casting of iron, iron ores, steel or ferro-alloys, including the cleaning of castings and handling of casting mould materials.	
Application		All installations.	
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	30
		Existing	100

Sulphur dioxide	SO ₂	New	400
		Existing	400
Oxides of nitrogen	NO _x expressed as NO ₂	New	400
		Existing	1200

• **Subcategory 4.11: Agglomeration Operations**

Description		Production of pellets or briquettes using presses, inclined discs or rotating drums.	
Application		All installations.	
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	30
		Existing	100
Ammonia	NH ₃	New	30
		Existing	50

• **Subcategory 4.12: Pre-Reduction and Direct Reduction *(Applicable to this application)***

Description		Production of pre-reduced or metallised ore or pellets using gaseous or solid fuels.	
Application		All installations.	
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	50
		Existing	100
Sulphur dioxide (from natural gas)	SO ₂	New	100
		Existing	500
Sulphur dioxide (from all other fuels)	SO ₂	New	500
		Existing	1700
Oxides of nitrogen	NO _x expressed as NO ₂	New	500
		New (all other fuels)	1000
		Existing	2000

• **Subcategory 4.22: Pre-Hot Dip Galvanizing**

Description		The coating of steel articles with zinc using molten zinc, including the pickling and / or fluxing of articles before coating.	
Application		All installations.	
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Particulate matter	N/A	New	10
		Existing	15
Hydrogen Chloride	HCl	New	30
		Existing	30

Category 5: Mineral Processing, Storage and Handling

• Subcategory 5.1: Mineral Processing, Storage and Handling

Description	Storage and handling of ore and coal not situated on the premises of a mine or works as defined in the Mines Health and Safety Act 29/1996.		
Application	Locations designed to hold more than 100 000 tons.		
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Dust fall	N/A	New	a
		Existing	a
Three months running average not to exceed limit value for adjacent land use according to dust control regulations promulgated in terms of section 32 of the NEM: AQA, 2004 (Act No. 39 of 2004), in eight principal wind directions.			

Category 6: Organic Chemicals Industry

Description	The production or use in production of organic chemicals not specified elsewhere including acetylene, acetic, maleic or phthalic anhydride or their acids, carbon disulphide, pyridine, formaldehyde, acetaldehyde, acrolein and its derivatives, acrylonitrile, amines and synthetic rubber. The production of organometallic compounds, organic dyes and pigments, surface-active agents. The polymerisation or co-polymerisation of any unsaturated hydrocarbons substituted hydrocarbon (including vinyl chloride). The manufacture, recovery or purification of acrylic acid or any ester of acrylic acid. The use of toluene di-isocyanate or other di-isocyanate of comparable volatility; or recovery of pyridine.		
Application	All installations producing or using more than 100 tons per annum of any of the listed compounds		
Substance or Mixture of Substances		Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa
Sulphur trioxide (from sulphonation processes)	SO ₃	New	30
		Existing	100
Acrylonitrile (from processes producing and/or using acrylonitrile).	CH ₂ CHCN	New	5
		Existing	5
Methylamines (from nitrogen-containing organic chemicals)	CH ₅ N	New	10
		Existing	10
Total volatile organic compounds (thermal)	N/A	New	150
		Existing	150
Total volatile organic compounds (non-thermal)	N/A	New	40 000
		Existing	40 000

Category 7: Inorganic Chemicals Industry

• Subcategory 7.2: Production of Acids

Description	The production, bulk handling and or use in manufacturing of hydrofluoric, hydrochloric, nitric and sulphuric acid (including oleum) in concentration exceeding 10%. Processes in which oxides of sulphur are emitted through the production of acid sulphites of alkalis or alkaline earths or through the production of liquid sulphur or sulphurous acid. Secondary production of hydrochloric acid through regeneration		
Application	All installations producing, handling and or using more than 100 tons per annum of any of the listed compounds (Excluding metallurgical processes-related activities regulated under category 4).		
Substance or Mixture of Substances	Plant Status	mg/Nm ³ under normal conditions of 273 Kelvin and 101.3 kPa	
Total fluoride measured as Hydrogen Fluoride (from processes in which HF evolved)	N/A	New	5
		Existing	30
Hydrogen chloride (from primary production of hydrochloric acid)	HCl	New	15
		Existing	25
Hydrogen chloride (from secondary production of hydrochloric acid)	HCl	New	30
		Existing	100
Sulphur dioxide	SO ₂	New	350
		Existing	2800
Sulphuric acid mist and sulphur trioxide expressed as SO ₃ (from processes in Which SO ₃ is evolved)	SO ₃	New	25
		Existing	100
Oxides of nitrogen expressed as NO ₂	Nox	New	350
		Existing	2000

3.4. NEM:AQA Section 21 Requirements and Compliance Timeframes

Definitions in GN 893

Existing plant “means any plant or process that was legally authorized to operate before 01 April 2010 or any plant where an application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), was made before 01 April 2010.”

New plant “means any plant or process where the application for authorisation in terms of the National Environmental Management Act 1998, (Act No. 107 of 1998), was made on or after 01 April 2010.”

Compliance time frames

- Part 2, Section 8 of the MES (GN 893) that *“new plants must comply with the new plant minimum emission standards as contained in Part 3 from 01 April 2010.”*
- Part 2, Section 9 of the MES (GN 893) stipulates that *“existing plants must comply with minimum emission standards for existing plant as contained in Part 3 by 01 April 2015, unless where specified.”*
- Part 2, Section 10 of the MES (GN 893) stipulates that *“existing plants must comply with minimum emission standards for new plant as contained in Part 3 by 01 April 2020, unless where specified.”*

The ArcelorMittal Vanderbijlpark Works legally operated under the authorisation of a registration certificate in terms of the Atmospheric Pollution Prevention Act (No. 45 of 1965) (APPA). Part 2, Paragraph 10 of GN 893. Authorised activities were therefore required to comply with the MES for new plants by the 1st April 2020 unless otherwise specified or subject to a postponement. ArcelorMittal was granted a postponement in terms of the SO₂ up to 31st March 2025, and interim alternative emission limits has been set.

Emission monitoring results indicate that the DR Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter (“PM”) and oxides of nitrogen (“NOx”). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard.

ArcelorMittal South Africa is therefore applying, in terms of Section 12A of Government Notice 893 (as amended), for an alternative SO₂ emission limit applicable to the DR Kilns for a defined interim period associated with the anticipated remaining operational life of the units, ongoing technology investigations, operational feasibility assessments, and the phased operational restructuring currently being implemented at the Vanderbijlpark Works.

Applicability and Validity of Section 12A of Government Notice 893 (as amended)

It is noted that certain interested and affected parties have previously raised concerns regarding the applicability and continued availability of the Section 12A mechanism contained in Government Notice 893 (as amended), particularly in circumstances where the compliance date for existing plants to meet the applicable new plant Minimum Emission Standards (“MES”) has already passed.

In this regard, it is submitted that Section 12A remains a valid and applicable regulatory mechanism available to qualifying existing plants under the current regulatory framework.

Paragraph 12A of Government Notice 893 (as amended) expressly provides that an existing plant may submit an application regarding a new plant standard where the plant is unable to comply with a particular pollutant or pollutants, provided that the plant demonstrates previous emission reduction efforts, implemented mitigation measures, and investments directed toward compliance with the applicable standards. The provision further empowers the National Air Quality Officer, following consultation with the Licensing Authority, to grant an alternative emission limit or emission load subject to the requirements set out in the regulation.

Importantly, the wording of Paragraph 12A does not prescribe a fixed deadline by which such applications must be submitted, nor does the provision state that the mechanism ceases to exist after the lapse of the original MES compliance date applicable to existing plants. The provision remains incorporated within Government Notice 893 (as amended) and has not been repealed, withdrawn, or amended to remove the availability of the mechanism.

The fact that existing plants were required to comply with new plant standards from 1 April 2020 does not, in itself, extinguish or invalidate the authority of the National Air Quality Officer to consider and determine

applications submitted in terms of Paragraph 12A. The provision specifically exists to address circumstances where compliance with a particular pollutant standard may not be technically feasible or economically reasonable despite previous efforts undertaken toward compliance.

Furthermore, the regulatory framework established under NEM:AQA must be interpreted in a manner consistent with the principles of administrative justice, rational decision-making, proportionality, and sustainable development as contemplated under the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"). This includes consideration of technical feasibility, socio-economic implications, operational realities, and broader environmental outcomes when regulatory decisions are taken.

The interpretation that the Section 12A mechanism has automatically lapsed merely because the original MES compliance date has passed would effectively render the provision incapable of fulfilling its intended regulatory purpose in circumstances where ongoing operational, technical, or economic constraints prevent immediate compliance. Such an interpretation would also create regulatory uncertainty and may undermine the intended flexibility expressly incorporated into the regulatory framework through the inclusion of Paragraph 12A.

In addition, ArcelorMittal South Africa previously utilised the applicable regulatory mechanisms available under Government Notice 893 through the submission of postponement applications and the implementation of interim alternative emission limits approved by the authorities. The current application represents a continuation of ongoing regulatory engagement regarding the specific technical limitations associated with achieving the applicable new plant SO₂ emission standard at the Direct Reduction ("DR") Kilns.

It is therefore submitted that the current application for an alternative SO₂ emission limit in terms of Paragraph 12A of Government Notice 893 (as amended) remains competent, lawful, and properly before the competent authority for consideration.

3.5. National Ambient Air Quality Standards

The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM: AQA") introduced a more integrated approach to air quality management within South Africa by incorporating both source-based emission control and receptor-based air quality management principles. While source-based regulation remains important through the implementation of Minimum Emission Standards ("MES") and Atmospheric Emission Licensing requirements, NEM: AQA also places significant emphasis on the protection of ambient air quality at sensitive receptors within the receiving environment.

Under a receptor-based approach, the potential impact of atmospheric emissions on surrounding communities and sensitive environments is assessed through consideration of ambient air quality concentrations measured or predicted at receptor locations. These measured or predicted ambient concentrations are compared against the applicable National Ambient Air Quality Standards ("NAAQS").

The NAAQS prescribe the maximum permissible ambient concentrations for specific pollutants over defined averaging periods, together with the allowable frequency of exceedances where applicable. The standards are intended to protect public health and wellbeing by establishing acceptable ambient exposure thresholds for pollutants known to have adverse health or environmental effects.

Where ambient air quality concentrations exceed the applicable standards, this may indicate degraded air quality conditions and an increased potential risk of adverse health impacts, particularly for sensitive and vulnerable population groups.

Ambient air quality standards therefore serve an important regulatory and health protection function by linking atmospheric emission sources to the potential exposure experienced by people and the receiving environment at downwind receptor locations. The standards are intended to indicate ambient pollution levels that are generally considered acceptable for the protection of public health over both short-term and long-term exposure periods, including protection of vulnerable population groups such as children, the elderly, and individuals with pre-existing health conditions.

The World Health Organization (“WHO”) publishes international air quality guideline values based primarily on scientific and health-related considerations associated with pollutant exposure. However, national governments remain responsible for establishing country-specific ambient air quality standards that take into account broader local considerations, including socio-economic conditions, industrial development requirements, technical feasibility, and regional environmental management priorities.

In South Africa, National Ambient Air Quality Standards have been established for a range of priority pollutants, including particulate matter (PM₁₀ and PM_{2.5}), sulphur dioxide (“SO₂”), nitrogen dioxide (“NO₂”), ozone (“O₃”), carbon monoxide (“CO”), benzene, lead, and dust fall.

The NAAQS accordingly provide the primary framework for assessing the potential impacts of atmospheric emissions on ambient air quality and public health and form an important consideration in the evaluation of applications submitted in terms of Section 12A of Government Notice 893 (as amended), particularly in relation to the assessment of potential health risks and cumulative impacts within the receiving environment.

The National Ambient Air Quality Standards (NAAQS), therefore, provide a basis for protecting public health from adverse effects of air pollution and for eliminating, or reducing to a minimum, those contaminants of air that are known, or likely, to be hazardous to human health and wellbeing.

Protection of Children and Other Vulnerable Receptors

ArcelorMittal South Africa recognises that particular consideration must be given to the protection of vulnerable population groups, including children, the elderly, and individuals with pre-existing respiratory and cardiovascular conditions, when evaluating potential air quality impacts associated with industrial activities. This approach is consistent with the principles contained in the Constitution of the Republic of South Africa, the National Environmental Management Act, 1998 (Act No. 107 of 1998) (“NEMA”), and the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (“NEM”), which collectively promote the protection of human health and wellbeing.

In support of this application, the Atmospheric Impact Report (“AIR”) specifically identified and assessed sensitive receptors located within the study area, including residential areas, schools, healthcare facilities and other locations where vulnerable populations may be present. The assessment modelled the predicted ambient SO₂ concentrations at these receptor locations under the various operational scenarios, including the proposed alternative SO₂ emission limit scenario.

The AIR concluded that the predicted ambient SO₂ concentrations at all assessed sensitive receptor locations remain below the applicable National Ambient Air Quality Standards (“NAAQS”) and that no exceedances are expected under the assessed scenarios. These findings were further supported by the Community Health Risk Assessment (“HHRA”), which concluded that the attributable health risks associated with ambient SO₂ exposure remain insignificantly different from current or background risks.

The AIR and HHRA therefore collectively demonstrate that implementation of the proposed alternative SO₂ emission limit is not expected to result in unacceptable health impacts to surrounding communities,

including children and other vulnerable population groups residing, attending school, working, or receiving healthcare services within the study area.

3.6. Alignment with the Vaal Triangle Airshed Priority Area Air Quality Management Plan

The ArcelorMittal Vanderbijlpark Works is located within the Vaal Triangle Airshed Priority Area ("VTAPA"), which was declared in terms of Section 18 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), due to historically elevated ambient concentrations of particulate matter and industrial emissions within the airshed.

The Vaal Triangle Air Quality Management Plan ("AQMP") establishes a framework aimed at achieving progressive improvements in ambient air quality through a combination of regulatory controls, operational improvements, emission reduction measures, infrastructure upgrades, and broader industrial emission management interventions across the airshed. A key objective of the AQMP is the progressive reduction of overall emissions associated with priority pollutants such as particulate matter ("PM"), sulphur dioxide ("SO₂"), and oxides of nitrogen ("NO_x").

The AQMP further recognises that emission reduction interventions should be implemented in a manner that is technically feasible, economically sustainable, and appropriately balanced against broader operational, industrial, and socio-economic considerations applicable within the priority area.

The revised operational strategy currently being implemented at the Vanderbijlpark Works aligns with these broader principles through operational restructuring, plant rationalisation, reduced coke production capacity, and revised operational configurations across the facility, rather than relying exclusively on dedicated end-of-pipe SO₂ abatement technologies at the Direct Reduction ("DR") Kilns. Investigations undertaken by ArcelorMittal South Africa have indicated that the implementation of the sulphur removal technologies required for the DR kilns to achieve the applicable new plant SO₂ emission standard is presently not considered technically practicable or economically sustainable within the current operational and financial context of the Vanderbijlpark Works.

The updated scenario assessment undertaken as part of this application demonstrates that the overall SO₂ emissions profile of the Vanderbijlpark Works is strongly influenced by the broader operational configuration of the integrated steelworks, including coke production capacity, blast furnace operations, gas usage profiles, and the operational status of major process units.

Under the baseline scenario representing higher production conditions during 2018, the total estimated SO₂ emission load for the Vanderbijlpark Works was approximately **9 764,9 tonnes per annum**.

The current operational scenario reflects an estimated total SO₂ emission load of approximately **9 989,1 tonnes per annum**, primarily influenced by the current operational configuration following the shutdown of Coke Batteries 6 to 9, the continued operation of the DR kilns at current measured emission concentrations, and revised fuel gas usage patterns.

Under the revised future operational scenario applying the requested alternative emission limit of **1 500 mg/Nm³** for the DR kilns, while retaining Coke Battery 4 in operation, the total estimated SO₂ emission load is projected to reduce to approximately **9 133,3 tonnes per annum**. This represents an approximate **6% reduction relative to the baseline scenario** and an approximate **9% reduction relative to the current operational scenario**.

Under the alternative future operational scenario where Coke Battery 4 is no longer operational, the estimated total SO₂ emission load further reduces to approximately **8 270,8 tonnes per annum**,

representing an approximate **15% reduction relative to the baseline scenario** and approximately **17% reduction relative to the current operational scenario**.

For comparative purposes, the scenario assessment further indicates that, should the DR kilns theoretically achieve compliance with the applicable new plant SO₂ emission standard of **500 mg/Nm³**, the total estimated SO₂ emission load could reduce to approximately **7 572,4 tonnes per annum**, representing an approximate **22% reduction relative to the baseline scenario** and approximately **24% reduction relative to the current operational scenario**. However, based on the technical investigations and feasibility assessments undertaken by ArcelorMittal South Africa, achieving and sustaining this emission limit at the DR kilns is currently not considered technically feasible or economically sustainable.

The results of the scenario assessment therefore demonstrate that meaningful reductions in overall works wide SO₂ emissions can still be achieved through broader operational restructuring, plant rationalisation, reduced coke production capacity, and revised operational configurations, even where the DR kilns continue operating under the proposed alternative emission limit.

In addition, the broader operational optimisation measures are anticipated to contribute toward improved operational efficiencies and reductions in emissions from selected operational areas across the Works, including reductions associated with particulate matter and other operational emission sources identified as pollutants of concern within the Vaal Triangle Airshed Priority Area.

Accordingly, the proposed alternative emission limit application should be considered within the context of the broader operational transition occurring at the Vanderbijlpark Works and the objective of achieving cumulative emissions reductions across the facility and wider airshed. From an airshed management and regulatory perspective, the requested alternative emission limit for the DR kilns therefore represents a balanced and reasonable interim approach that allows for continued operation and operational restructuring at the Vanderbijlpark Works while still contributing toward the broader emissions reduction objectives of the Vaal Triangle Airshed Priority Area Air Quality Management Plan.

VTAPA and cumulative pollution burden

The Vanderbijlpark Works is located within the Vaal Triangle Airshed Priority Area ("VTAPA"), where particulate matter remains one of the primary pollutants of concern within the airshed. ArcelorMittal South Africa acknowledges the importance of achieving progressive improvements in ambient air quality within the VTAPA and recognises the objectives of the Vaal Triangle Air Quality Management Plan ("AQMP").

Importantly, the revised operational scenarios assessed as part of this application demonstrate that the proposed operational restructuring and plant rationalisation measures currently being implemented at the Vanderbijlpark Works will still result in measurable reductions in overall works wide SO₂ emissions, notwithstanding the continued operation of the Direct Reduction ("DR") Kilns under the proposed alternative emission limit.

The scenario assessment indicates that broader operational restructuring measures, including the shutdown of Coke Batteries 6, 7, 8 and 9, revised operational configurations, reduced coke production capacity, and altered gas usage profiles, contribute materially toward reductions in the total SO₂ emissions profile associated with the Vanderbijlpark Works.

The AIR and HHRA further concluded that the proposed alternative emission limit would not result in exceedances of the applicable SO₂ National Ambient Air Quality Standards or material increases in community health risk at the assessed sensitive receptor locations. The proposed alternative emission limit should therefore be considered within the context of the overall reduction in works-wide emissions currently being achieved through the revised operational strategy applicable to the Vanderbijlpark Works.

4. DISCUSSION ON EMISSION REDUCTION STRATEGY IMPACTS

ArcelorMittal South Africa (“AMSA”) previously applied for alternative SO₂ emission limits for the Direct Reduction (“DR”) Kilns as part of the regulatory compliance process applicable to the Vanderbijlpark Works. Under previous postponement approvals granted in terms of the Minimum Emission Standards (“MES”) framework, interim alternative SO₂ emission limits were approved for specific DR kiln stacks.

Emission monitoring conducted at the DR kilns between 2021 and 2025 indicates that the average SO₂ concentration emitted from the kiln stacks was approximately **1 330 mg/Nm³**. These results demonstrate that, despite operational optimisation measures, investigations into alternative operational approaches, and assessments of potential emission reduction technologies, the DR kilns remain unable to achieve compliance with the applicable new plant SO₂ emission standard of **500 mg/Nm³**.

ArcelorMittal South Africa has indicated that the DR kilns are unlikely to achieve compliance with the applicable new plant SO₂ emission standard within their remaining operational lifespan under the current operational and technological conditions applicable to the Vanderbijlpark Works.

One of the primary constraints associated with achieving the applicable SO₂ emission standard is the exceptionally large flue gas volumes associated with the DR kiln process, which exceed approximately **800 000 Nm³/hour**. The implementation of conventional flue gas desulphurisation technologies at this scale would require substantial capital-intensive infrastructure and significant ongoing operational expenditure. Based on the investigations undertaken by ArcelorMittal South Africa, such technologies are currently considered technically impracticable and economically disproportionate from a Best Practicable Environmental Option (“BPEO”) perspective, as contemplated in the National Framework for Air Quality Management (2017).

The primary source of SO₂ emissions associated with the DR kilns is the sulphur content contained within the coal utilised as reductant material during the direct reduction process. The sulphur content of the coal utilised within the process generally ranges between approximately **0.7% and 1.8%**, with an average sulphur content of approximately **1.5%**.

Over time, the sulphur content of the coal utilised within the Direct Reduction (“DR”) kilns has increased due to changes in coal availability and supply constraints. Historically, lower sulphur coal sourced from the Leeuwpark operation was utilised within the DR process. However, following depletion of the Leeuwpark coal source, replacement coal sources with higher sulphur content have had to be utilised. Historical operational data indicates that the average sulphur content of the DR kiln coal increased from approximately **0.43% in 2015** to values consistently approaching or exceeding **0.90% between 2022 and 2025**, with recorded annual average sulphur contents of approximately **0.97% in 2023, 0.98% in 2024, and 0.94% in 2025**. This increase in sulphur content within the available coal supply has further contributed to the challenges associated with reducing SO₂ emissions from the DR kiln process.

ArcelorMittal continuously investigates opportunities to optimise coal quality and source lower sulphur coals where reasonably available. However, the availability of suitable lower sulphur reductant coal has progressively decreased over time due to market constraints and depletion of historical coal sources. Furthermore, coal selection is not solely based on sulphur content, but also on several critical metallurgical parameters required to maintain stable DR kiln operation. The use of lower sulphur coal alone has not proven sufficient to achieve compliance with the applicable new plant SO₂ emission standard.

The coal utilised within the DR kilns forms an integral component of the metallurgical reduction process. Approximately **0.8 tons of coal** are introduced for every **1.42 tons of iron ore** processed in order to produce approximately one ton of sponge iron. The sulphur associated with the coal feedstock is therefore intrinsically linked to the reduction chemistry and operational performance of the kilns and cannot readily

be eliminated without materially affecting kiln stability, metallurgical performance, and operational efficiency.

Investigations into the use of lower sulphur coal blends and alternative coal sourcing strategies have been undertaken by ArcelorMittal South Africa. However, trials conducted to date have not demonstrated sufficient reductions in SO₂ emissions to consistently achieve the applicable new plant SO₂ emission standard.

ArcelorMittal South Africa has furthermore adopted diversified iron ore sourcing strategies in order to maintain operational and economic sustainability within the ironmaking operations of the Vanderbijlpark Works. Certain iron ore sources are not optimally suited for direct use within blast furnace operations due to impacts on furnace stability, operational efficiency, and coke consumption rates. These ore types can, however, effectively be processed through the DR kilns to produce Direct Reduced Iron ("DRI"), which can subsequently be utilised within blast furnace operations.

The continued operation of the DR kilns therefore provides important operational flexibility within the integrated ironmaking process and assists in maintaining blast furnace stability while reducing reliance on higher-cost premium blast furnace ore sources.

Operationally, the DR process also provides additional benefits to the Vanderbijlpark Works through reductions in blast furnace coke consumption and the recovery of waste heat energy associated with the kiln operations. The DR kilns generate both high-pressure and low-pressure steam which is utilised throughout the Works for operational steam requirements and associated energy-related processes.

The continued operation of the DR kilns therefore remains strategically important to the broader operational stability, energy integration, and economic sustainability of the Vanderbijlpark Works as an integrated steel manufacturing facility.

Revised Operational Strategy

Since the submission of the previous Section 12A application, the operational strategy for the Vanderbijlpark Works has materially changed as a result of operational restructuring, revised production planning, and significant financial constraints affecting the Group.

The previously proposed operational strategy included the construction of new coke batteries, a large-scale coke oven gas cleaning and desulphurisation plant, and the future implementation of an Electric Arc Furnace ("EAF") route. These projects formed part of the earlier operational and emissions reduction planning assumptions.

However, these projects are no longer considered financially or operationally feasible under the current circumstances applicable to the Vanderbijlpark Works. As a result, the operational strategy has been revised substantially.

The revised operational configuration now includes the following measures:

Plant Rationalisation and Closures

The following coke batteries have already been permanently shut down:

- Closure of Coke Battery 6 (2024)
- Closure of Coke Battery 7 (2024)
- Closure of Coke Battery 8 (2025)
- Closure of Coke Battery 9 (2025)

As a result, only Coke Battery 4 currently remains operational at the Vanderbijlpark Works.

Direct Reduction Kiln Operations

The revised operational strategy includes the operation of only three of the six DR kilns, with two kilns operating and one maintained on standby and maintenance rotation. The remaining three kilns are anticipated to remain shut down.

The future operational scenarios assessed in this application assume operation of the DR kilns at the proposed alternative SO₂ emission limit of 1 500 mg/Nm³, with an overall operational runtime assumption of approximately 50% under future operational conditions.

Coke Oven Gas Cleaning Plant

Historically, ArcelorMittal South Africa (“AMSA”) proposed the installation of a Coke Oven Gas Cleaning and desulphurisation plant intended to reduce SO₂ emissions associated with coke oven gas utilised throughout the Vanderbijlpark Works. The original design basis for the project was developed around a significantly larger operational configuration that included multiple operational coke batteries as well as previously proposed future coke battery infrastructure.

The proposed gas cleaning system was intended to treat coke oven gas generated from several coke batteries and to reduce the sulphur content of the gas prior to its use as a fuel source across various operational units within the Works. At the time, this formed part of the broader long-term operational strategy for the Vanderbijlpark Works.

AMSA has already invested approximately **R1 billion** into the project through civil works, engineering preparation, and the procurement of major equipment components. However, since the development of the original project concept, the operational strategy for the Vanderbijlpark Works has materially changed due to operational restructuring and significant financial constraints affecting the facility and the broader AMSA group.

These changes have included the permanent shutdown of Coke Batteries 6, 7, 8 and 9, together with the abandonment of the previously proposed future coke battery expansion programme. As a result, only Coke Battery 4 currently remains operational.

Under the revised operational configuration, the originally designed gas cleaning plant is now considered substantially oversized relative to the significantly reduced coke oven gas volumes associated with the remaining single operational coke battery. Significant redesign, re-engineering, and additional capital expenditure would therefore be required in order to adapt the plant to the revised operational conditions.

Considering the remaining anticipated operational life of Coke Battery 4, together with the current operational and financial constraints applicable to the Vanderbijlpark Works, AMSA has determined that further investment into completion of the originally proposed gas cleaning plant project is no longer considered technically or economically justifiable.

Accordingly, AMSA has resolved not to proceed with completion of the Coke Oven Gas Cleaning Plant under the originally proposed project configuration.

AMSA intends to submit, through a separate regulatory process, the necessary application to the competent authority seeking approval for the continued operation of Coke Battery 4 without the implementation of a gas cleaning plant for the remainder of the battery's operational life. Should the competent authority not approve the relevant application or exemption request, Coke Battery 4 will be permanently shut down.

Scenario Assessment Outcomes

The updated scenario assessment undertaken as part of this application demonstrates that broader operational restructuring and plant rationalisation measures can contribute toward reductions in the overall SO₂ emission profile of the Vanderbijlpark Works, notwithstanding the continued operation of the DR kilns under the requested alternative emission limit.

The 2018 baseline scenario resulted in a total estimated SO₂ emission load of approximately **9 764,9 tonnes per annum**.

The current operational scenario results in an estimated SO₂ emission load of approximately **9 989,1 tonnes per annum**.

Under the future operational scenario applying the requested alternative emission limit of 1 500 mg/Nm³ for the DR kilns while retaining Battery 4 in operation, the total estimated SO₂ emission load reduces to approximately **9 133,3 tonnes per annum**, representing an approximate **6% reduction relative to the baseline scenario** and an approximate **9% reduction relative to the current operational scenario**.

Under the future operational scenario where no coke batteries remain operational, the total estimated SO₂ emission load further reduces to approximately **8 270,8 tonnes per annum**, representing an approximate **15% reduction relative to the baseline scenario** and approximately **17% reduction relative to the current operational scenario**.

The assessment further indicates that, should the DR kilns theoretically achieve compliance with the new plant MES limit of 500 mg/Nm³, the total estimated SO₂ emission load would reduce to approximately **7 572,4 tonnes per annum**, representing an approximate **22% reduction relative to the baseline scenario** and approximately **24% reduction relative to the current operational scenario**.

These results demonstrate that meaningful reductions in overall works wide SO₂ emissions can still be achieved through broader operational restructuring, plant rationalisation, revised gas usage profiles, and reduced coke production capacity, even where the DR kilns continue operating under the proposed alternative emission limit.

Renewable Energy Contribution

As part of the broader decarbonisation strategy, ArcelorMittal also intends to install a 200 MW solar power facility.

According to the Eskom 2022 Sustainability Report, Eskom emitted approximately 1 671 kt of SO₂ while producing 198.3 TWh of electricity, corresponding to an emission intensity of approximately 8.427 tons of SO₂ per GWh of electricity generated.

The proposed solar facility is expected to generate approximately 509.4 GWh per year (P95 confidence level).

This corresponds to an avoided SO₂ emission load of approximately:

$$509.4 \text{ GWh} \times 8.427 \text{ tSO}_2/\text{GWh} \approx 4\,292 \text{ tons SO}_2 \text{ avoided per annum}$$

The proposed solar facility therefore contributes to meaningful regional reductions in SO₂ emissions within the Vaal Triangle Airshed Priority Area, supporting the broader objectives of improving ambient air quality within the airshed.

Scenario 1 – Baseline Actual Conditions

The baseline SO₂ emission load for the ArcelorMittal Vanderbijlpark Works was determined as approximately **9 764,9 tons per annum**. This baseline is based on the measured site operational conditions for the 2018 production year, which represents a period of relatively high production levels with most of the ironmaking facilities in operation.

The 2018 production year therefore represents a reasonable worst-case operational scenario for the facility and was used as the reference baseline for the scenario comparison analysis. In subsequent years, production levels declined and several plant units were permanently shut down, resulting in lower emissions. However, these lower production years would not represent the potential emission profile should production levels increase again in future.

Under this baseline scenario:

- Multiple coke oven batteries were operational;
- Most ironmaking and steelmaking facilities were operational;
- DR Kiln 1 and DR Kiln 2 were not operational, which remains consistent with the current operational status;
- DR Kiln 4 operated at very low uptime (<1%);
- The coke oven gas cleaning system was not effectively removing SO₂ from the fuel gas streams.

The total plant SO₂ emission load under this baseline scenario was estimated at approximately **9 764,9 tons per annum**.

This scenario therefore represents the maximum reasonable emissions baseline against which future operational and emission reduction scenarios were assessed.

Scenario 2 – Current Operational Scenario

Scenario 2 represents the current operational configuration of the Vanderbijlpark Works following operational restructuring and plant closures implemented between 2024 and 2025.

These changes include the permanent shutdown of several coke oven batteries, specifically:

- Coke Oven Battery 6 (2024)
- Coke Oven Battery 7 (2024)
- Coke Oven Battery 8 (2025)
- Coke Oven Battery 9 (2025)

Under the current operational configuration, only Coke Battery 4 remains operational.

The Direct Reduction operations currently consist of three operational kilns operating at an average measured SO₂ concentration of approximately **1 330 mg/Nm³**, with an operational uptime of approximately **77% per kiln**.

Additional operational assumptions include:

- Two blast furnaces operating;
- Two BOF furnaces operating;
- Two sinter strands operating;
- Coke oven gas utilised as fuel without desulphurisation.

Under this current operational scenario, the total SO₂ emission load from the Works is estimated at approximately **9 989,1 tons per annum**.

The assessment indicates that, under the current operational configuration, the Direct Reduction kilns remain one of the major contributors to the total SO₂ emissions profile of the Vanderbijlpark Works.

Scenario 3 – Future Operational Strategy with Alternative Emission Limit of 1 500 mg/Nm³

Scenario 3 represents the future operational configuration under the revised operational strategy, assuming approval of the requested alternative SO₂ emission limit of **1 500 mg/Nm³** for the Direct Reduction kilns.

Under this scenario, the following operational assumptions apply:

- Two sinter strands operating;
- Full blast furnace operation;
- Operation of three DR kilns, with two kilns operating and one kiln on standby or maintenance rotation;
- Overall DR kiln operational runtime of approximately 50%;
- Operation of two BOF furnaces, with one additional BOF on standby;
- No Electric Arc Furnace ("EAF");
- Continued operation of Coke Battery 4 without a gas cleaning plant, subject to regulatory approval through a separate approval process.

This scenario reflects the revised realistic future operational configuration of the Vanderbijlpark Works following the abandonment of the previously proposed EAF route and new coke battery expansion projects.

Under this scenario, the total plant SO₂ emission load is estimated at approximately **9 133,3 tons per annum**.

This represents an approximate:

- **6% reduction relative to the baseline scenario;** and
- **9% reduction relative to the current operational scenario.**

Scenario 4 – Future Operational Scenario without Coke Battery 4

Scenario 4 evaluates a potential future operational scenario in which Coke Battery 4 reaches the end of its operational life, or alternatively where approval is not granted for continued operation without a gas cleaning plant, resulting in permanent closure of the battery.

Under this scenario, the remaining operational configuration is similar to Scenario 3 and includes:

- Two sinter strands operating;
- Full blast furnace operation;
- Operation of three Direct Reduction kilns;
- Two BOF furnaces operating with one on standby;
- No coke oven operations.

Under this scenario, the total plant SO₂ emission load is estimated at approximately **8 270,8 tons per annum**.

This represents an approximate:

- **15% reduction relative to the baseline scenario;** and
- **17% reduction relative to the current operational scenario.**

Scenario 5 – Future Operational Scenario Assuming MES Compliance at the DR Kilns

Scenario 5 represents a theoretical scenario in which the Direct Reduction kilns are able to achieve compliance with the applicable new plant SO₂ emission standard of **500 mg/Nm³**, while the remainder of the Works operates under the same operational assumptions as Scenario 3.

Under this scenario, the total plant SO₂ emission load is estimated at approximately **7 572,4 tons per annum**.

This represents an approximate:

- **22% reduction relative to the baseline scenario;** and
- **24% reduction relative to the current operational scenario.**

However, achieving this emission limit would require the installation of large-scale flue gas desulphurisation technology on the Direct Reduction kilns. Based on the investigations undertaken by ArcelorMittal South Africa, such technologies are currently considered technically impracticable and economically unjustifiable considering the exceptionally large flue gas volumes associated with the kiln stacks, the operational limitations of the process, the remaining operational life of the kilns, and the current operational and financial constraints affecting the Vanderbijlpark Works.

Summary of Scenario Evaluation

The scenario analysis demonstrates that meaningful reductions in total plant SO₂ emissions can be achieved through the operational restructuring, plant rationalisation, and revised operational configuration currently being implemented at the Vanderbijlpark Works, even where the Direct Reduction kilns operate at the requested alternative emission limit of 1 500 mg/Nm³.

Under the revised future operational configuration (Scenario 3), the total SO₂ emission load from the Works is expected to reduce by approximately **6% relative to the baseline scenario** and approximately **9% relative to the current operational scenario**, despite the continued operation of the Direct Reduction kilns under the proposed alternative emission limit. Additional reductions may be achieved in future should further legacy operational units, including Coke Battery 4, cease operation.

The assessment further demonstrates that broader operational restructuring measures across the Vanderbijlpark Works can contribute toward measurable reductions in overall works-wide emissions, notwithstanding the operational limitations associated with achieving the current new plant SO₂ emission standard at the Direct Reduction kilns.

The requested alternative emission limit therefore provides a realistic and operationally achievable interim approach that allows for the continued operation of the Direct Reduction kilns within the revised operational strategy of the Vanderbijlpark Works, while still contributing toward measurable reductions in overall emissions within the Vaal Triangle Airshed Priority Area.

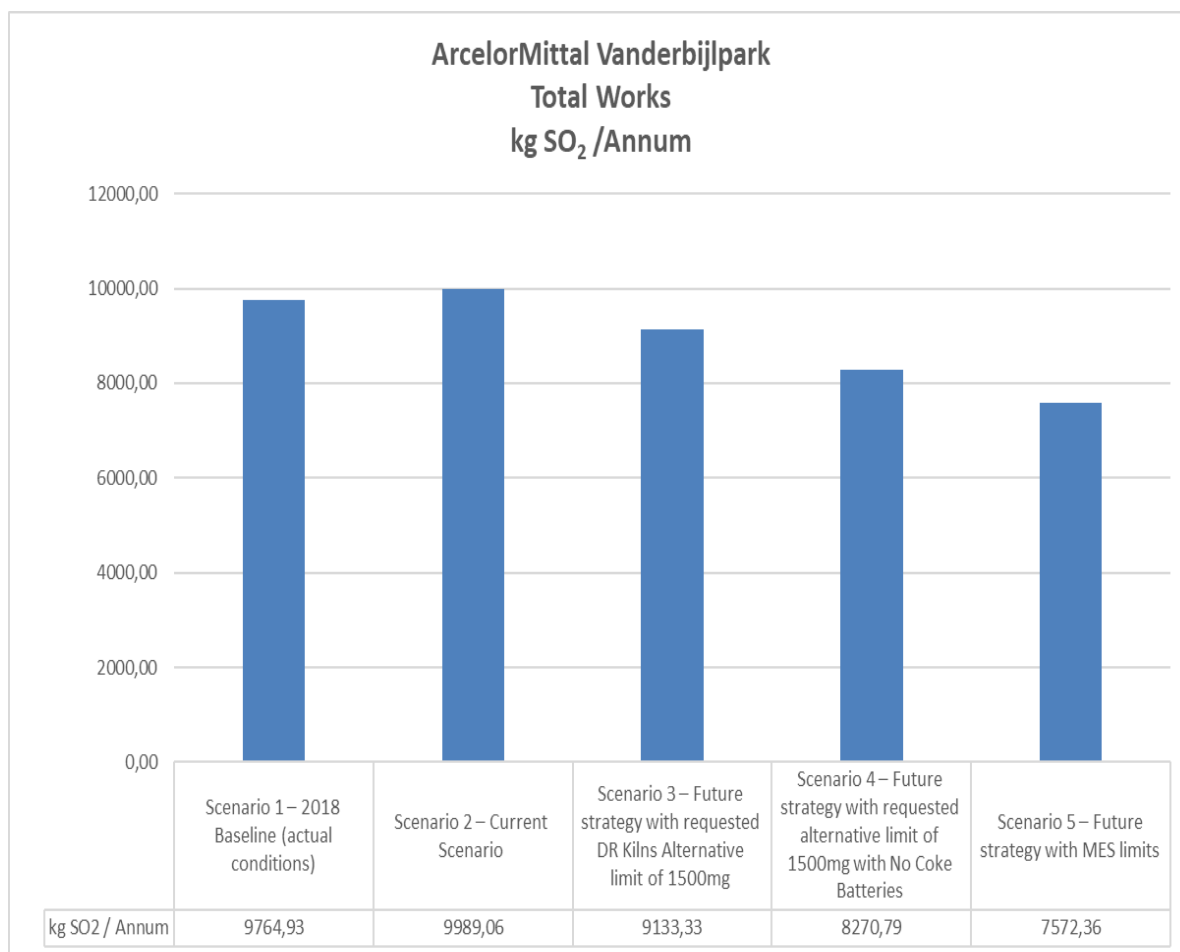


Figure 16:SO₂ Baseline vs Future Senario Comparison for the Total Works

The main emission reductions predicted for the future senario is realised at the Coke Oven Batteries, Sinter Plant, HSM, Plate Mills and HP Boilers. The increase at the DR Kilns is due to the worstcase operational uptime senario.

The future senario includes the operation of the existign Coke Battery #4.

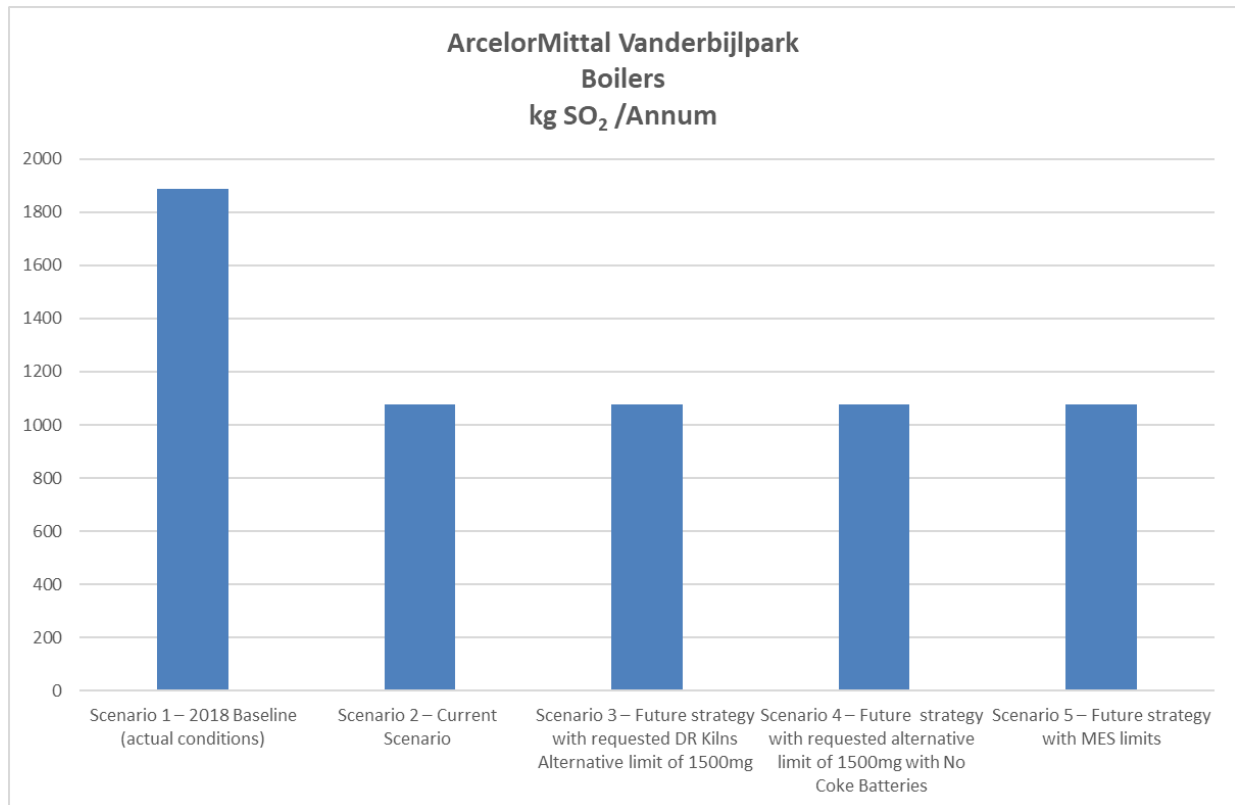


Figure 22: SO₂ Baseline vs Future Senario Comparison for the Boilers

With the decommissioning of four coke batteries, substantially less coke oven gas is available for internal use within the Vanderbijlpark Works. As a result, several historical coke oven gas consumers have transitioned to natural gas as an alternative energy source.

Interpretation of the SO₂ Emission Scenario Comparison

The scenario comparison illustrates the estimated total SO₂ emission loads from the Vanderbijlpark Works under the various operational scenarios assessed as part of this application.

The baseline scenario (**Scenario 1**) represents the previous higher-production operational period during 2018, when most of the ironmaking facilities and multiple coke batteries were operational. Under these conditions, the total plant-wide SO₂ emission load was estimated at approximately 9 764,9 tons per annum. This scenario represents the reasonable maximum operational emissions baseline for the Vanderbijlpark Works and serves as the reference point against which the future operational scenarios were evaluated.

The current operational scenario (**Scenario 2**) reflects the present operational configuration following the permanent shutdown of Coke Batteries 6, 7, 8 and 9 between 2024 and 2025. Under this configuration, only Coke Battery 4 remains operational. The current scenario results in a total estimated SO₂ emission load of approximately 9 989,1 tons per annum. Although several plant closures have occurred, the overall SO₂ emissions profile remains elevated due to the continued operation of the Direct Reduction kilns, blast furnace operations, and the continued use of coke oven gas and coal-based production processes which inherently generate SO₂ emissions.

Scenario 3 represents the revised future operational configuration under the proposed alternative SO₂ emission limit of 1 500 mg/Nm³ for the Direct Reduction kilns. Under this scenario, the total estimated SO₂ emission load decreases to approximately 9 133,3 tons per annum. This represents an approximate

6% reduction relative to the baseline scenario and an approximate 9% reduction relative to the current operational scenario.

Scenario 4 represents a future operational configuration in which Coke Battery 4 is no longer operational, either due to reaching the end of its operational life or as a result of future operational decisions and regulatory outcomes. Under this scenario, the total estimated SO₂ emission load decreases further to approximately 8 270,8 tons per annum, representing an approximate 15% reduction relative to the baseline scenario and an approximate 17% reduction relative to the current operational scenario.

For comparative purposes, **Scenario 5** represents a theoretical scenario in which the Direct Reduction kilns achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³. Under this scenario, the total estimated SO₂ emission load decreases to approximately 7 572,4 tons per annum, representing an approximate 22% reduction relative to the baseline scenario and an approximate 24% reduction relative to the current operational scenario.

While Scenario 5 demonstrates the theoretical reductions that could be achieved through full compliance with the current new plant SO₂ emission standard, achieving and sustaining this emission limit would require the installation of large-scale flue gas desulphurisation systems on the Direct Reduction kilns. Considering the exceptionally high flue gas volumes associated with the kiln stacks, the operational characteristics of the process, the remaining operational life of the units, and the current financial and operational constraints affecting the Vanderbijlpark Works, such interventions are presently considered technically impracticable and economically disproportionate.

The scenario analysis therefore demonstrates that meaningful reductions in total plant-wide SO₂ emissions can still be achieved through broader operational restructuring, plant rationalisation, revised operational configurations, and reduced coke production capacity, even where the Direct Reduction kilns continue operating under the proposed alternative emission limit of 1 500 mg/Nm³.

This approach remains aligned with the broader objectives of the Vaal Triangle Airshed Priority Area Air Quality Management Plan, which seeks progressive improvements in ambient air quality through cumulative emission reductions across the industrial sector and broader airshed, while taking into consideration technical feasibility, operational realities, and economic sustainability.

5. MOTIVATION FOR S12A ALTERNATIVE EMISSION STANDARD AT THE DR KILNS IN TERMS OF SO₂

4.1. DR Kiln Plant Compliance Levels

According to Section 12 A;

- a. *an existing plant may submit an application regarding a new plant standard to the National Air Quality Officer for consideration if the plant is in compliance with other emission standards but cannot comply with a particular pollutant or pollutants.*

The Kilns plant is therefore in compliance with all other pollutants but will not be compliant with the New Plant MES for SO₂ from the 1st April 2025.

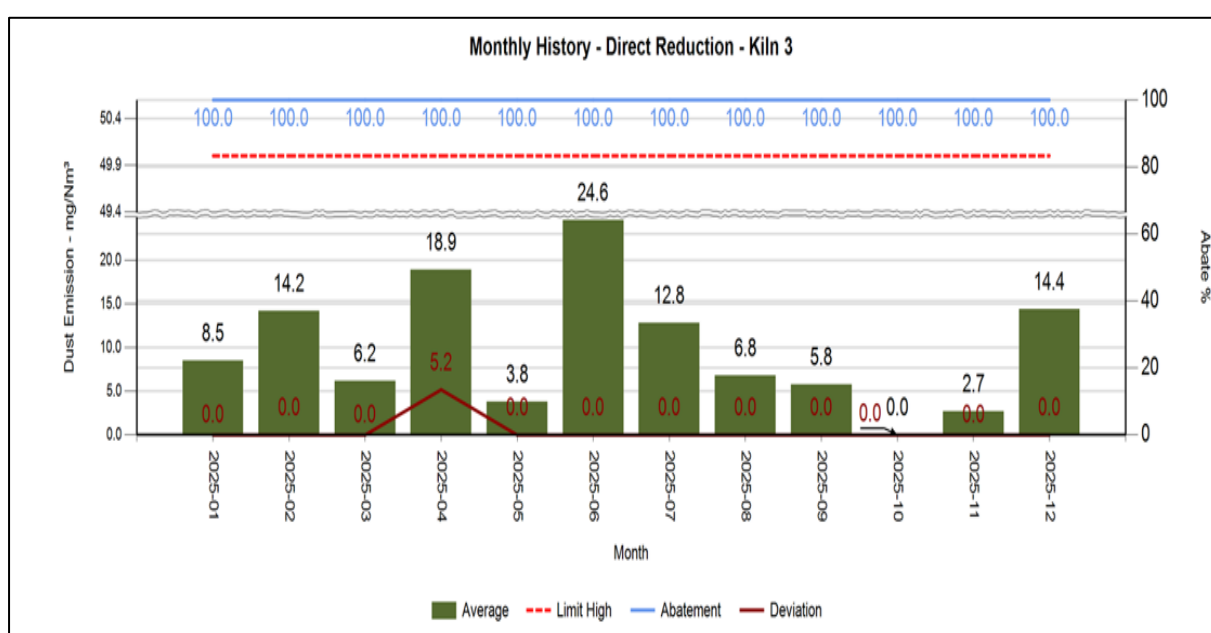


Figure 23: DRI Kiln 3 Monthly History for Dust

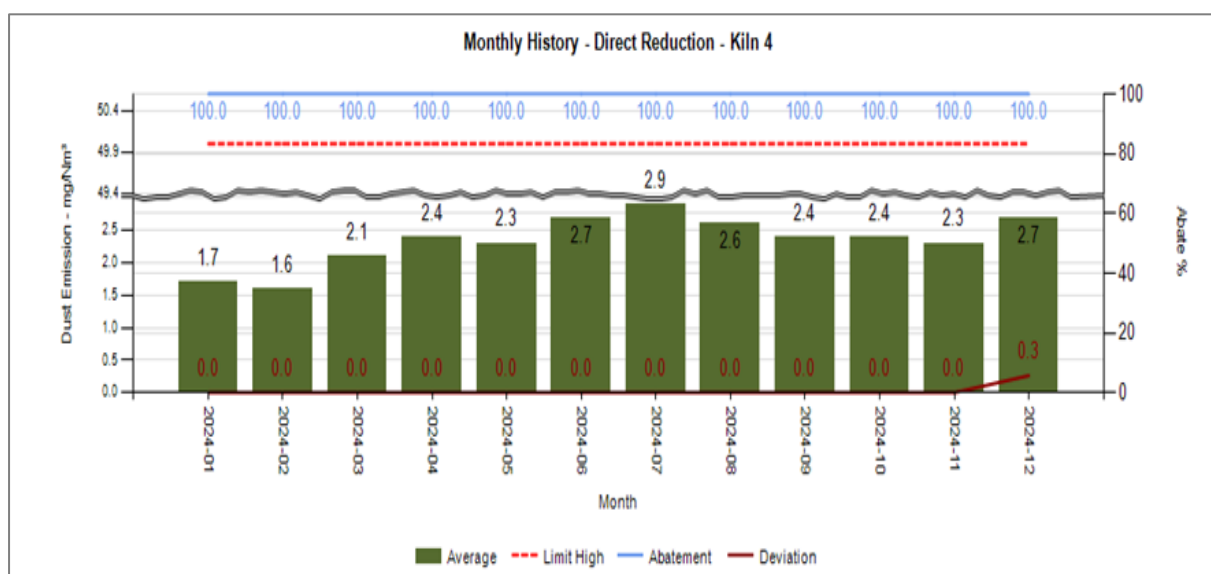


Figure 174: DRI Kiln 4 Monthly History for Dust
(No production in 2025)

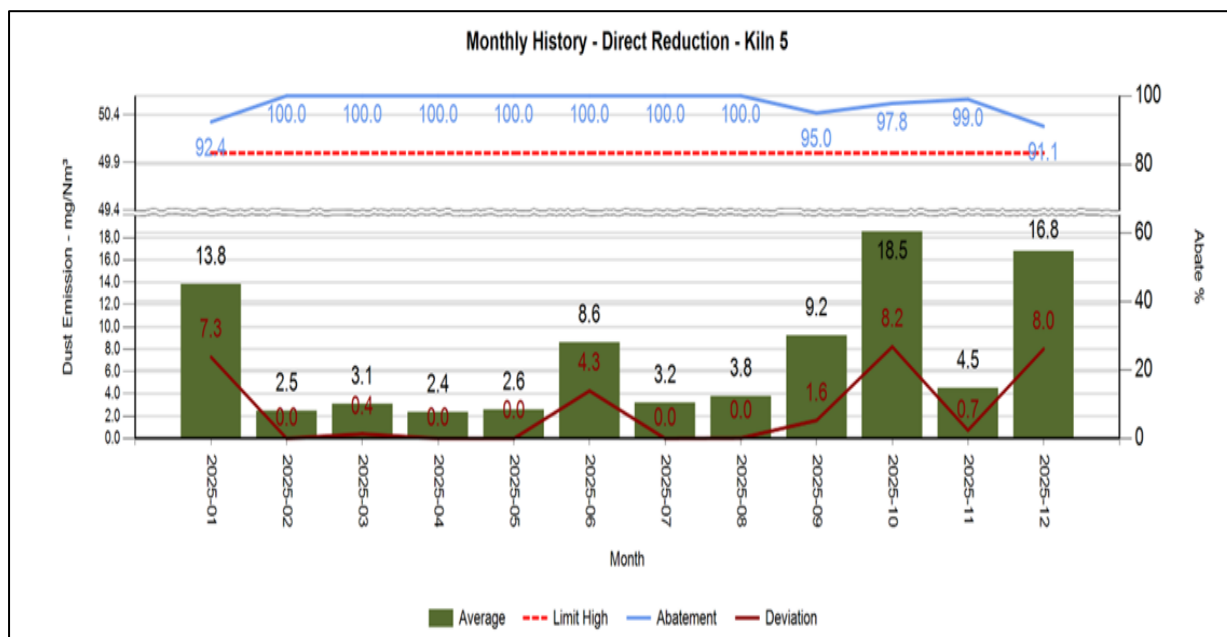


Figure 185: DRI Kiln 5 Monthly History for Dust

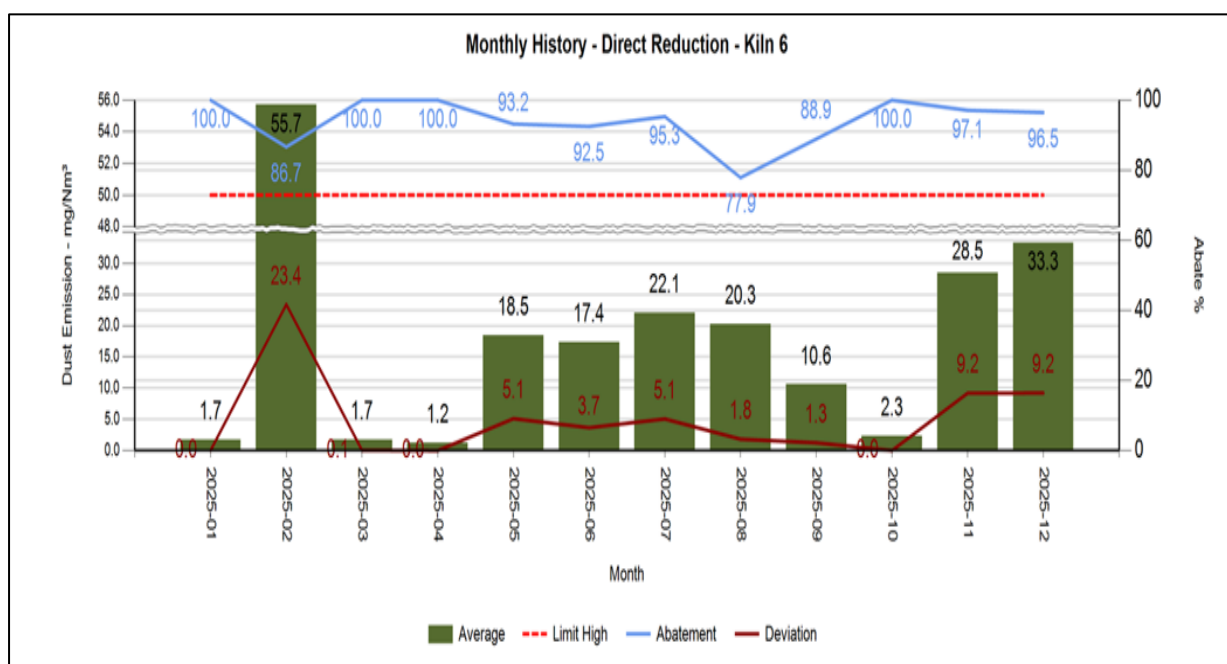


Figure 19: DRI Kiln 6 Monthly History for Dust

Table 7: Compliance Performance for the DR Kilns

Point Source Code	Pollutant Name	Maximum Emissions Release Rate	Alternative Emission Limit (was valid until 31 March 25)	Actual avg release rate for 2020	Actual avg release rate for 2021	Actual avg release rate for 2022	Actual avg release rate for 2023	Actual avg release rate for 2024	Actual avg release rate for 2025	Compliance status for audit period 1 Jan 2022 – 31 Dec 2025
DR Kilns										
Kiln 1	PM	50		Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
	SO₂	500		Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
	NO_x	1 000		Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
Kiln 2	PM	50		Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
	SO₂	500		Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
	NO_x	1 000		Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
Kiln 3	PM	50		Plant off	Plant off	17.1	17.1	16.2	Plant off	Compliant
	SO₂	500	800	Plant off	Plant off	1285	927	1055	Plant off	Non-Compliant
	NO_x	1 000		Plant off	Plant off	63.43	38.6	47.4	Plant off	Compliant
Kiln 4	PM	50		11.8	18.3	13.1	12.3	Plant off	Plant off	Compliant
	SO₂	500	500	862	955	2046.13	1524	Plant off	Plant off	Non-Compliant
	NO_x	1 000		23.4	45.7	29.02	41.6	Plant off	Plant off	Compliant
Kiln 5	PM	50		13.2	17.9	11.0	11.6	14.4	7.55	Compliant
	SO₂	500	700	977	996	1203.51	1186	1117	1119.91	Non-Compliant
	NO_x	1 000		25.9	62.0	74.69	74.4	76.3	72.39	Compliant
Kiln 6	PM	50		18.4	15.8	18.4	11.7	16.1	17.85	Compliant
	SO₂	500	750	785	1065	632	1204	1023	1182.8	Non-Compliant
	NO_x	1 000		32.6	59.5	41.9	87.9	703	97.4	Compliant

ArcelorMittal South Africa acknowledges the importance of progressively improving emissions performance and reducing atmospheric pollution within the Vanderbijlpark Works and the broader Vaal Triangle Airshed Priority Area.

The present application does not seek to avoid environmental compliance obligations indefinitely, nor does it seek to undermine the objectives of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) or the Minimum Emission Standards framework. Rather, the application seeks approval for a technically achievable and operationally sustainable interim alternative emission limit while ongoing investigations, research, operational trials, and technology assessments continue in relation to potential long-term SO₂ reduction solutions applicable to the Direct Reduction ("DR") Kilns.

ArcelorMittal South Africa has demonstrated that significant operational restructuring, emissions reduction initiatives, and plant rationalisation measures have already been implemented across the Vanderbijlpark Works and that substantial reductions in overall works wide SO₂ emissions have already been achieved over time.

Based on the current understanding of the technological requirements, engineering complexity, operational integration constraints, and financial limitations applicable to the Vanderbijlpark Works, ArcelorMittal South Africa currently anticipates that a period of approximately 10 years may reasonably be required to further investigate, assess, and potentially implement a viable long-term SO₂ reduction solution capable of achieving the applicable new plant emission standard at the DR kilns.

The requested alternative emission limit should therefore be regarded as an interim and proportionate regulatory mechanism that balances environmental protection objectives with technical feasibility, operational sustainability, and the broader socio-economic implications associated with the continued operation of the Vanderbijlpark Works.

4.2. DR Kilns and Works wide SO₂ load

SO₂ emissions from the kilns are dependent on the sulphur content in the coal which is utilised as the reducing agent in the kilns on site.

ArcelorMittal Vanderbijlpark Works is applying for an alternative SO₂ emission standard of 1 500 mg/Nm³ for the Direct Reduction Kilns instead of the required new plant emission limit of 500 mg/Nm³ as required in terms of Sub-category 4.12: Prereduction and Direct Reduction for new plants.

It is not economically feasible to achieve this standard for the direct reduction kilns at Vanderbijlpark Works as the SO₂ emissions from the kilns are dependent on the sulphur content in the coal which is utilised as the reducing agent in the kilns on site. For this reason, an application for an alternative emission standard of 1 500 mg/Nm³, aligned with the existing plant standard, is being applied for.

From a Best Practicable Environmental option perspective (as referenced in the 2017 National Framework for Air Quality Management), it is not practicable to install abatement technology to reduce SO₂ emissions to below the prescribed new plant emission standard. A flow rate in excess of 400 000 m³/hr (i.e. from the kilns) will need to be accommodated, which exceeds the capacity of any known gas cleaning technology.

Scenario 1 – Baseline Actual Conditions

The baseline scenario (scenario 1) was based on the operational site, as it was operated in 2018. The year 2018 was chosen as baseline, as this represents a high production year, with most plants operational. It therefore represents the actual worst base emissions base. Later years for instance, lower production rates resulted in lower actual conditions, which could increase again, when production is increased.

In this scenario, DR Kiln 1 and DR Kiln 2 was not operational, as is currently the case as well, with DR Kiln 4 a very low uptime of < 1%. This scenario's included all the iron making plants operational, but the Coke oven Clean Gas plant not effectively removing SO₂.

Table 8: Summary of Baseline Actual Conditions (based on 2018 data)

Current based on 2018	NOx	SO ₂	PM
Sinter	1539	2074	559
DR Kilns	134	1783	109
Coke ovens and CO flared gas	1002	1217	78
BF and BF flared gas	58	1083	51
OSM	163	158	71
Foundry	1	0	4
Paint line	15	0	0
HSM	217	1090	7
Plate mill	97	470	3
Galv 3	2	0	0
Galv 4	0	0	0
Galv 5	0	0	0
HP Boilers	1463	1888	20
AMCC Tar plant	0	1	0
Lurgi	4	1	0
Annealers	0	0	0
Sum	4695,9	9764,9	901,2

Scenario 2 – Current Emissions Scenario

In this scenario, the operations remain the same for all plants, as it was operational in the 2018 baseline. The emissions profile includes the reduction in Coke Battery emissions, as Coke Battery 6, 7, 8 and 9 has since been shut down.

Direct reduction is simulated as being 3 DR kilns operational at 77% operational time on their existing measured current readings **1330 mg/Nm³**. This will be aligned with the future scenario, where 1 Kiln is off for maintenance, and 2 Kilns always remains operational. This provides an average uptime of 77% per annum.

Table 9: Summary of Current Conditions

Current	NOx	SO ₂	PM
Sinter	1810	2873	452
DR Kilns	161	3197	99
Coke ovens and CO flared gas	845	863	27
BF and BF flared gas	43	1702	57
OSM	19	20	96
Foundry	0	0	1
Paint line	5	0	0

Current	NOx	SO2	PM
HSM	101	16	0
Plate mill	26	242	1
Galv 3	1	0	0
Galv 4	0	0	0
Galv 5	0	0	0
HP Boilers	439	1076	12
AMCC Tar plant	0	0	0
Lurgi	2	0	0
Annealers	0	0	0
Sum	3453,5	9989,1	746,5

Scenario 3 – Future Scenario, with DR Kilns at the proposed alternative limit

In this scenario, the emissions profile is the same as the current emissions, with the exception that the DR Kilns is operating at the proposed **1 500 mg/Nm³** (50% uptime).

Table 10: Scenario 3

Future	NOx	SO2	PM
Sinter	1810	2873	459
DR Kilns	105	2341	83
Coke ovens and CO flared gas	845	863	27
BF and BF flared gas	43	1702	57
OSM	19	20	96
Foundry	0	0	1
Paint line	5	0	0
HSM	101,2	16,1	0,2
Plate mill	26	242	1
Galv 3	1	0	0
Galv 4	0	0	0
Galv 5	0	0	0
HP Boilers	439	1076	12
AMCC Tar plant	0	0	0
Lurgi	2	0	0
Annealers	0	0	0
Sum	3397,6	9133,3	730,5

Scenario 4 – Future Scenario with no Coke Making

In this scenario, the emissions profile is the same as the current emissions, with the exception that the DR Kilns is operating at the proposed **1 500 mg/Nm³** (50% uptime), and that there would be no Coke Batteries.

Table 11: Future Actual Conditions

Future	NOx	SO2	PM
Sinter	1810	2873	459
DR Kilns	105	2341	83
Coke ovens and CO flared gas	0	0	0
BF and BF flared gas	43	1702	57
OSM	19	20	96

Future	NOx	SO ₂	PM
Foundry	0	0	1
Paint line	5	0	0
HSM	101	16	0
Plate mill	26	242	1
Galv 3	1	0	0
Galv 4	0	0	0
Galv 5	0	0	0
HP Boilers	439	1076	12
AMCC Tar plant	0	0	0
Lurgi	2	0	0
Annealers	0	0	0
Sum	2552,3	8270,8	703,7

Scenario 5 – Future Operational Scenario Assuming MES Compliance at the DR Kilns

Scenario 5 represents a theoretical scenario in which the Direct Reduction kilns are able to achieve compliance with the applicable new plant SO₂ emission standard of **500 mg/Nm³**, while the remainder of the Works operates under the same operational assumptions as Scenario 3.

Under this scenario, the total plant SO₂ emission load is estimated at approximately **7 568,4 tons per annum**.

Table 12: Future Actual Conditions

Future	NOx	SO ₂	PM
Sinter	1810	2873	452
DR Kilns	105	781	83
Coke ovens and CO flared gas	845	863	27
BF and BF flared gas	43	1702	57
OSM	19	20	96
Foundry	0	0	1
Paint line	5	0	0
HSM	101	16	0
Plate mill	26	242	1
Galv 3	1	0	0
Galv 4	0	0	0
Galv 5	0	0	0
HP Boilers	439	1076	12
AMCC Tar plant	0	0	0
Lurgi	2	0	0
Annealers	0	0	0
Sum	3397,6	7572,4	730,5

This scenario has been included primarily for comparative assessment purposes in order to illustrate the potential theoretical reduction in overall works-wide SO₂ emissions should the DR kilns achieve full compliance with the applicable new plant SO₂ emission standard.

However, based on the investigations undertaken by ArcelorMittal South Africa, the DR kilns are currently unable to achieve the applicable SO₂ emission limit of 500 mg/Nm³ under existing operational conditions and available technically feasible mitigation measures. Achieving this standard would require the

implementation of large-scale sulphur removal or flue gas desulphurisation technologies associated with exceptionally high capital expenditure, substantial operational costs, and significant technical integration challenges due to the very large flue gas volumes associated with the DR kiln process.

At this stage, ArcelorMittal South Africa is unable to commit to a definitive compliance date for achieving the new plant SO₂ emission standard of 500 mg/Nm³ at the DR kilns. The potential pathway toward future compliance remains dependent on ongoing research, technology assessments, operational investigations, pilot evaluations, and the identification of technically feasible and economically sustainable emission reduction solutions applicable to the DR kiln process.

Based on the current understanding of the technological requirements, engineering complexity, operational integration requirements, and financial constraints applicable to the Vanderbijlpark Works, ArcelorMittal South Africa anticipates that a period of approximately **10 years** may reasonably be required to further investigate, assess, develop, and potentially implement a viable long-term SO₂ reduction solution capable of achieving the applicable new plant emission standard at the DR kilns.

Accordingly, while Scenario 5 demonstrates the theoretical emissions reductions that could be achieved should the applicable new plant SO₂ emission standard eventually be met, the scenario should be regarded as a potential long-term outcome dependent on future technological feasibility, operational sustainability, regulatory considerations, and broader economic conditions applicable to the Vanderbijlpark Works.

4.3. Emission Reduction Measures for the Direct Reduction Kilns

According to Section 12 A;

b. An application must demonstrate a previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.

Description	Investment Cost
Direct Investments to date for entire Works reduce SO ₂ emissions load	
Existing Coke Oven Clean Gas and Water Project	R 330 million
Coke Oven Gas Cleaning Plant with desulphurisation	R 1billion spent to date
Direct Investments Planned in future at the DR Kilns to reduce SO ₂ emissions concentration	
Trials on existing plant	R0.8 million (Refer to feedback below)
Direct Investments Planned in future for entire Works reduce SO ₂ emissions load	
Coke Oven Gas Cleaning Plant with desulphurisation	R1.9 Billion R 1billion spent to date R 900 million remaining (No longer planned)
EAF	R 3.6 billion (On hold)
New Coke batteries	R 3.0 billion (No longer planned)

Feedback on initial trial results at the DR Kilns.

Trials were conducted during the August/September 2025 production campaigns on the Direct Reduction kilns to assess the feasibility of reducing SO₂ emissions through hydrated lime injection. The trial system and application recommendations were supplied by Lesedi, while flow modelling and process integration assessments were completed in-house by ArcelorMittal South Africa. A dedicated test rig was constructed at a capital cost of approximately R620,000 and achieved its maximum design feed rate of 740 kg/h during

testing. The kiln remained stable and operated at ideal process temperatures throughout the trial period. Under these conditions, an SO₂ reduction of approximately 12% was achieved.

The relatively low reduction efficiency was considered technically understandable given the process conditions at the selected injection point. The injection location was chosen as a compromise between gas residence time, process safety, mixing behaviour, and the need to ensure that the reaction products could be captured by the downstream Electrostatic Precipitator (ESP). The selected location, between the Waste Heat Recovery Boiler (WHRB) and the ESP, provides favourable turbulence and gas mixing characteristics due to duct bends and accelerated gas flow. However, typical flue gas temperatures at this point range between 220°C and 250°C, which is lower than the temperatures generally required for optimal hydrated lime dissociation reactions.

At these lower temperatures, the reaction mechanism is dominated by chemisorption rather than thermal dissociation, reducing SO₂ removal efficiency and increasing reagent demand. Additional process constraints were identified, including corrosion risks to the ESP and downstream ducting at lower temperatures due to sulphuric acid formation, as well as potential damage to downstream equipment at excessively high temperatures. It was also noted that hydrated lime reacts preferentially with other acid gases such as HF, HCl and SO₃ at lower temperatures, further reducing SO₂ capture efficiency.

The trial results also highlighted significant operational cost implications associated with achieving higher SO₂ reductions through increased stoichiometric dosing ratios. Based on calculations provided during the assessment, lime consumption at elevated dosing ratios could exceed 1,000 kg/h per kiln, resulting in estimated operating costs in excess of R3 million per month per kiln, which is currently considered economically unfeasible relative to the reductions achieved.

Despite the initial results, the technology remains under active evaluation, and further optimisation trials are planned. Since completion of the 2025 trials, the test rig has been mechanically upgraded, including modifications to the gearbox and feed systems, allowing for injection rates of up to 2,000 kg/h. Commissioning of the upgraded system is planned for the end of Quarter 2 2026, pending delivery of hydrated lime to site. The upgraded rig is currently installed on Kiln 5, which is expected to recommission by end of Quarter 2, following replacement of the main drive gearbox.

Future trials scheduled for 2026 will focus on ultra-high stoichiometric ratio testing, with the stated objective of achieving at least a 40% reduction in SO₂ emissions before the technology would be considered technically feasible for broader implementation.

Further optimisation measures under consideration include the use of multiple simultaneous injection points to improve gas-solid contact opportunities, relocation of the injection point to higher temperature zones between the Afterburner Chamber (ABC) and the WHRB to promote dissociation-based reactions, and the evaluation of proprietary absorbent materials. The latter may involve collaboration opportunities with Eskom due to their experience with large-scale coal combustion and speciality absorbent supply chains.

No successful measures have to date been identified or implemented that are capable of achieving compliance with the applicable new plant SO₂ emission standard at the Direct Reduction ("DR") Kilns on a technically and economically sustainable basis. Investigations and trials undertaken by ArcelorMittal South Africa, including assessments of alternative coal sources and potential emission reduction technologies, have not demonstrated a feasible solution capable of consistently achieving the required SO₂ emission limit for the DR kiln process.

As a result, ArcelorMittal has focused its efforts on reducing the overall SO₂ emission load across the Vanderbijlpark Works through broader operational restructuring, plant rationalisation, and revised operational configurations rather than through dedicated end-of-pipe abatement at the DR kilns themselves.

The overall reduction in SO₂ emissions from the Works is anticipated to be achieved through measures including the permanent shutdown of several coke oven batteries, revised operational configurations of major process units, reduced coke production capacity, optimisation of plant operations, and the phased reduction or closure of selected legacy operational units over time.

Significant changes to the original operational strategy have, however, occurred since the previous application process. The previously proposed Coke Oven Gas Cleaning Plant, which was intended to remove sulphur from coke oven gas utilised across the Works, is no longer considered technically or economically feasible under the revised operational configuration of the Vanderbijlpark Works. Following the shutdown of multiple coke batteries, only Coke Battery 4 remains operational, rendering the originally designed gas cleaning plant substantially oversized for the remaining gas volumes. Consequently, ArcelorMittal has resolved not to proceed with completion of the gas cleaning plant project.

The implementation of dedicated sulphur removal technology required for the DR kilns to achieve the applicable new plant SO₂ emission limit would require substantial capital investment and significant operational expenditure. Based on the investigations undertaken by ArcelorMittal South Africa, such technologies are currently considered economically unjustifiable and technically impracticable within the present operational and financial context of the Vanderbijlpark Works.

4.4. Emission Load Reduction Measures for the whole ArcelorMittal Vanderbijlpark works

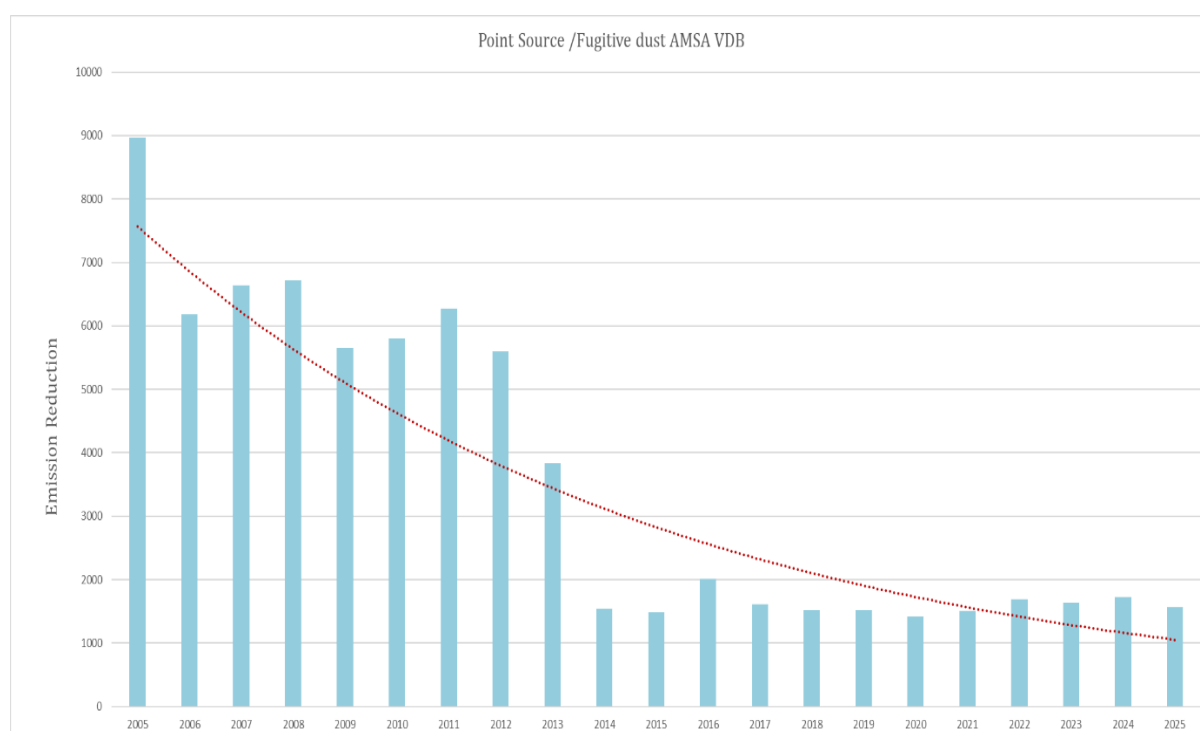


Figure 20 Emission Trend and Reduction for PM

Significant improvements and reductions of 79% in the overall emissions have been made in the last 20 years, to reduce the emission footprint. ArcelorMittal has implemented dust reduction projects to capture and reduce dust emissions from the facility, which includes but is not limited to the following.

- 2005 to 2006: The reduction from 2006 was as a result of the stoppage of dosing with SPL at the Sinter Plant in 2006.
- 2006 to 2007: Increase due to the start-up of Kiln 5 and 6

- 2011 to 2012: The rehabilitation projects on the waste site and historical contaminated land reduced the fugitive emissions considerably from 2011-2012, a total area of 273ha was vegetated. The Sinter bag house is one of various projects that were commissioned in 2012 as part of our ERS.
- The particulates (dust) emissions from the Sinter Main stack were the biggest single point source on site. The installation of abatement equipment to capture the emissions currently emitted from the stack was finalized and commissioned in October 2012. This project reduced the dust load for the Sinter plant by 93%. An additional bag house was also commissioned at the foundry in 2012 that contributed 76% reduction for the Foundry total emissions.
- 2012 to 2013: Shut-down of Coke Battery #3; reduced production due to the BOF fire, BF D off due to OSM fire, EAF only operational for 45 days in 2013
- 2013-2014- Blast furnace D bag house installed – fugitive roof emissions reduced by 2800 tons per year
- 2015-2016 - Higher emissions due to damaged bags on the sinter bag house and plant instability.
- 2016-2017- lower PM due to Sinter bag replacement and improved plant operations
- 2017-2018 – Improved management on Sinter baghouse and optimization of plant operations
- 2018 – baseline – More stable operations with preventative maintenance

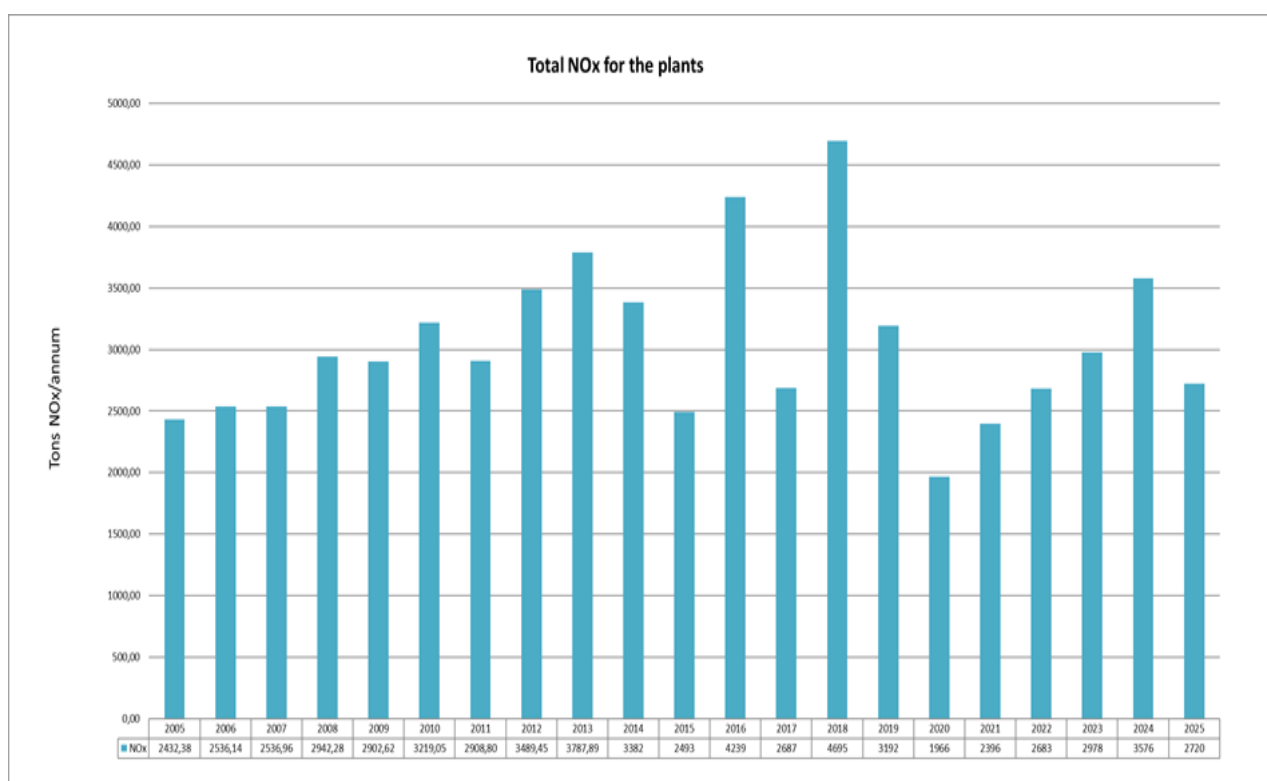


Figure 21 Emission Trend for NOx

NOx emissions have slightly increased over time. All stacks are still compliant with the NOx emissions, and no material exceedance is noted in the NOx ambient air quality.

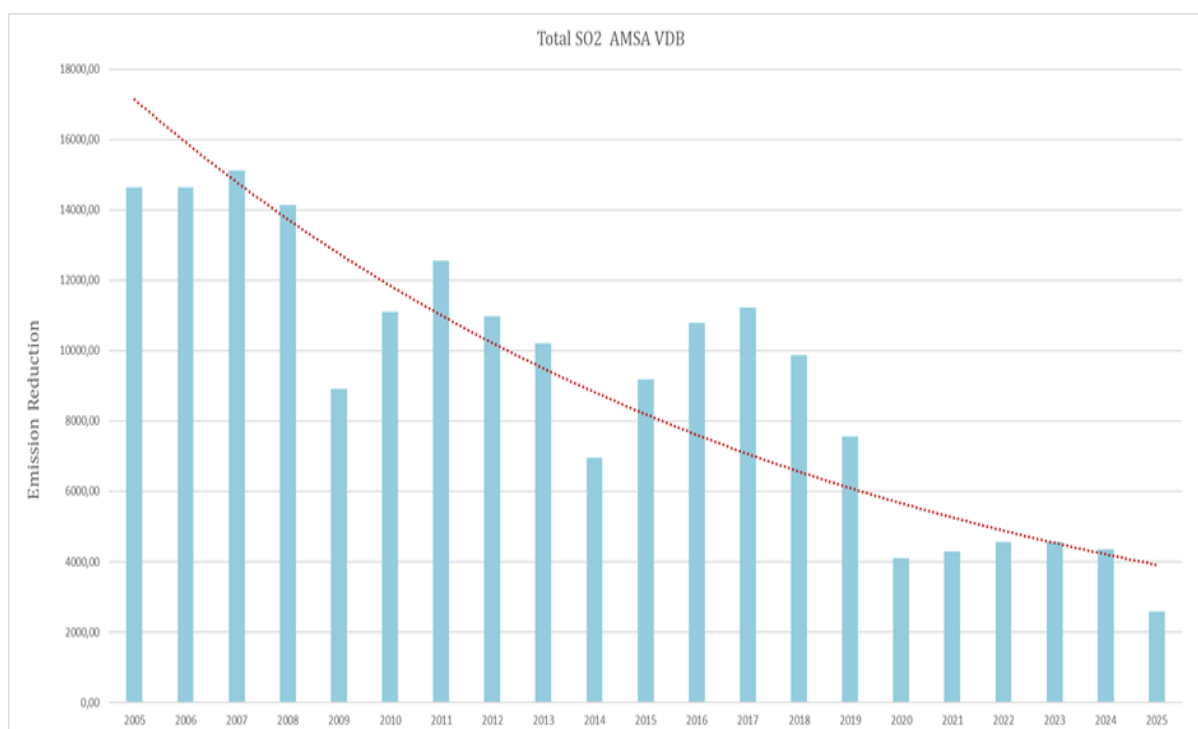


Figure 22 Emission Trend and overall reduction for SO₂

The historical emissions trend for the Vanderbijlpark Works demonstrates that substantial reductions in overall SO₂ emissions have already been achieved over the past two decades through operational optimisation, plant rationalisation, infrastructure upgrades, process improvements, and the shutdown of selected high-emitting operational units.

Based on the historical emissions inventory and trend analysis, the Vanderbijlpark Works has achieved an estimated overall reduction of **approximately 85% in total Works SO₂ emissions** over the past 20 years. These reductions were achieved through a combination of operational changes, reduced production capacity at selected plants, implementation of emissions reduction projects, and broader restructuring initiatives across the integrated steelworks.

2005 – 2008:

During this period, no major SO₂-specific reduction projects were implemented, and emissions remained largely linked to the prevailing production profile and operational configuration of the integrated steelworks.

2008 – 2009:

Significant reductions in emissions were achieved following the decommissioning of Coke Battery 1, together with reduced production levels associated with the global economic downturn.

2009 – 2011:

Production levels subsequently increased again. During this period, the Coke Oven Gas Cleaning and Ammonia Water (“COCGAW”) project was implemented. Although operational and technical challenges were experienced during implementation, the project formed part of broader efforts aimed at improving emissions performance associated with coke oven gas operations.

2012 – 2013:

Further reductions in SO₂ emissions were achieved through the shutdown of Coke Battery 3, the shutdown of the Electric Arc Furnace ("EAF"), and the commissioning of the new sinter plant baghouse system.

2013 – 2014:

During this period, some elevated measured emissions were recorded due to operational issues associated with damaged or broken bags within the sinter plant baghouse system, which subsequently required maintenance and replacement.

2014 – 2016:

Operational conditions during this period were influenced by coal quality and elevated hydrogen sulphide ("H₂S") concentrations associated with the off-gas streams.

2016 – 2017:

Further reductions were achieved through lower gas consumption across several plant areas together with improved operational stability.

2017 – 2018:

Improved operational performance of the main sinter baghouse system contributed toward further reductions in measured SO₂ emissions.

2024 – 2025:

Significant operational restructuring was implemented, including the shutdown of Coke Batteries 6, 7, 8 and 9, which contributed materially toward reductions in the overall SO₂ emission load associated with the Vanderbijlpark Works.

4.5. Socio-Economic considerations

Section 2 of the NEMA, sets out the principles which must be applied to the actions of all organs of state that may significantly affect the environment and provides that such principles must, inter alia, "*apply alongside all other appropriate and relevant considerations, including the State's responsibility to respect, protect, promote and fulfil the social and economic rights in Chapter 2 of the Constitution ...*" and "*serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of this Act or any statutory provision concerning the protection of the environment*" (own emphasis). In terms of section 2(3) of the NEMA, "development must be socially, environmentally and economically sustainable". Section 2(4)(g) of the NEMA provides that "*the social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment*" (own emphasis).

In considering this application for alternative emission limits in terms of Section 12A of Government Notice 893 (as amended), it is therefore submitted that the Competent Authority should consider not only the environmental implications associated with the requested alternative emission limit, but also the broader socio-economic, operational, and industrial implications associated with the continued operation of the ArcelorMittal South Africa Vanderbijlpark Works as an integrated steel manufacturing facility.

Should the requested alternative emission limit not be granted, the Direct Reduction ("DR") kilns would not be able to continue operating in compliance with the applicable Atmospheric Emission Licence requirements. This would place the continued operation of the DR kilns at significant risk and could have

substantial operational, economic, and employment-related consequences for the Vanderbijlpark Works and the broader downstream industrial economy.

The DR kilns perform a strategically important role within the integrated ironmaking operations of the Vanderbijlpark Works. ArcelorMittal South Africa has increasingly relied on a diversified range of iron ore sources in order to maintain operational flexibility and economic sustainability within the current market and operational environment. Certain ore types are not ideally suited for direct use within blast furnace operations due to impacts on furnace stability, pressure differentials, fuel consumption rates, and operational efficiency. However, these ore types can effectively be processed through the DR kilns to produce Direct Reduced Iron (“DRI”), which can subsequently be utilised within blast furnace operations.

The continued operation of the DR kilns therefore enables the Vanderbijlpark Works to utilise a broader range of iron ore feedstocks while reducing reliance on higher-cost premium-grade blast furnace ores. This operational flexibility contributes materially toward maintaining the operational and economic sustainability of the ironmaking process.

In addition, the use of DRI within blast furnace operations contributes toward reductions in blast furnace fuel consumption. Operational assessments undertaken by ArcelorMittal South Africa indicate that for every 100 kg of metallic iron introduced into the blast furnace through DRI charging, coke consumption may be reduced by approximately 30 kg per ton of hot metal produced. The DR kilns therefore contribute materially toward operational efficiency and fuel cost optimisation within the ironmaking process.

The DR kilns also contribute significantly toward steam and energy generation at the Vanderbijlpark Works. The kilns generate both high-pressure and low-pressure steam that is utilised throughout the facility to operate steam-driven equipment and support broader operational energy requirements. A substantial reduction or loss of steam generation capacity associated with the shutdown of the DR kilns could negatively affect the operational stability of the Works and associated operational processes.

The Vanderbijlpark Works operates as an integrated steel manufacturing facility where the shutdown or disruption of one major operational component may have cascading impacts on interconnected production processes, operational stability, supply chains, and employment sustainability across the broader operation.

The Vanderbijlpark Works currently employs approximately **3 750 permanent employees**, in addition to a significant number of contractors, service providers, and indirect employment opportunities supported through associated supply chains and downstream industries. A substantial portion of these employment opportunities supports historically disadvantaged communities within the surrounding region.

The socio-economic implications associated with a potential shutdown or severe operational curtailment of the DR kilns may therefore extend beyond the facility itself and could materially affect the broader regional and national economy through impacts on employment, industrial production capacity, infrastructure supply chains, manufacturing sectors, and downstream steel-dependent industries.

This consideration is particularly relevant within the context of the broader financial and operational pressures already affecting the ArcelorMittal South Africa group. The previously announced closure of the Long Steel operations has already resulted in substantial operational restructuring and economic impacts within the South African steel sector. Further operational disruption at the Vanderbijlpark Works may significantly increase the risk of broader operational instability and potential long-term closure risks associated with the facility.

In addition, reduced domestic steel production capacity may increase reliance on imported steel products and external supply sources, with associated implications for local industrial competitiveness, infrastructure development programmes, manufacturing resilience, and broader economic sustainability within South Africa.

While the environmental objectives associated with reducing SO₂ emissions remain acknowledged and important, the broader socio-economic implications associated with the continued operation of the Vanderbijlpark Works must also be considered within the decision-making process applicable to this application. The scenario assessment undertaken as part of this application further demonstrates that measurable reductions in overall works-wide SO₂ emissions can still be achieved through broader operational restructuring, plant rationalisation, and revised operational configurations, notwithstanding the continued operation of the DR kilns under the proposed alternative emission limit.

It is therefore submitted that, within the current operational, technical, and economic context applicable to the Vanderbijlpark Works, the granting of the requested alternative emission limit represents a balanced, reasonable, and proportionate outcome when considering the combined environmental, operational, social, and economic factors relevant to this application.

4.6. Why the Direct Reduction Kilns Cannot Simply be Shut Down

It may be argued that the simplest solution to achieving compliance with the applicable new plant SO₂ emission standard would be to permanently shut down the Direct Reduction (“DR”) Kilns. However, such an approach would have significant technical, operational, economic and socio-economic implications for the sustainability of the Vanderbijlpark Works and is therefore not considered a reasonable or proportionate solution.

The Vanderbijlpark Works operates as an integrated steel manufacturing facility, where the various production units are highly interdependent and function as part of a single production system rather than as independent operations. The DR Kilns perform several critical functions within this integrated process.

Firstly, the DR Kilns provide operational flexibility by allowing a wider range of iron ore sources to be utilised. Certain iron ore types are not ideally suited for direct use in the blast furnaces due to impacts on furnace stability, pressure drop characteristics, and coke consumption. These ores can, however, be effectively processed through the DR Kilns to produce Direct Reduced Iron (“DRI”), which can subsequently be utilised within the blast furnaces.

Secondly, the DRI produced by the DR Kilns contributes to improved blast furnace efficiency and reduced coke consumption. The use of DRI within the blast furnaces reduces overall fuel requirements and contributes to improved process stability.

Thirdly, the DR Kilns generate both high-pressure and low-pressure steam that is utilised throughout the Vanderbijlpark Works for various operational processes and electricity generation. The loss of this steam generation capacity would negatively affect the overall energy balance and operational stability of the facility.

The permanent shutdown of the DR Kilns would therefore extend beyond a single emission source and would materially affect the viability of the integrated steel manufacturing process. Such an outcome could significantly increase operational costs, reduce production flexibility, disrupt downstream processes, and potentially threaten the long-term sustainability of the Vanderbijlpark Works.

The environmental benefits associated with shutting down the DR Kilns must therefore be considered in the context of the broader consequences for the integrated operation, employment sustainability, domestic steel production capacity, and the overall socio-economic contribution of the Vanderbijlpark Works. In this context, the proposed alternative SO₂ emission limit represents a more balanced and proportionate approach, particularly where the specialist studies confirm that no material increase in ambient SO₂ concentrations or community health risks are expected and where overall works-wide SO₂ reductions can still be achieved through broader operational restructuring measures.

4.7. Indirect off set and Community-Based Environmental Improvement Initiatives

The offset projects do not form part of the legal justification for granting the alternative emission limit and are supplementary initiatives intended to improve the broader environmental footprint of the Vanderbijlpark Works.

The application does not rely on the offset projects to satisfy the legal requirements of Regulation 12A.

- Construct a waste management facility for municipal waste

In addition to the operational emission reduction and restructuring measures being implemented at the Vanderbijlpark Works, ArcelorMittal South Africa (“AMSA”) has also engaged in broader environmental support and offset-related initiatives aimed at contributing toward improved environmental management capacity and environmental conditions within the surrounding municipal area.

As part of previous engagements relating to environmental offset initiatives, AMSA completed an initial support initiative involving infrastructure improvements for the local licensing authority. Due to operational limitations experienced by the Sedibeng Licensing Authority, including the lack of suitable office facilities from which to perform its regulatory and administrative functions, AMSA undertook the refurbishment and upgrading of an unoccupied and damaged building to enable the authority to fulfil its environmental regulatory responsibilities from an operational facility.

In addition, AMSA is currently engaged in discussions and planning relating to a further potential environmental offset-related initiative associated with municipal waste management infrastructure within the broader Emfuleni Local Municipality area.

The proposed initiative currently under consideration includes the potential development of either:

- a municipal waste transfer and recovery facility incorporating recycling bays and composting areas for garden waste; or
- a formal municipal domestic waste disposal facility intended to improve lawful waste management infrastructure capacity within the municipal area.

Although the direct atmospheric emission reductions associated with such initiatives have not yet been quantified, the proposed projects are intended to contribute indirectly toward improved environmental conditions and reductions in uncontrolled emissions associated with poor waste management practices currently occurring within parts of the municipal area.

At present, inadequate waste management infrastructure within certain areas of the Emfuleni municipal region has contributed to illegal waste disposal practices and uncontrolled waste burning activities, both of which may contribute toward localised particulate matter emissions and other atmospheric pollutants.

The establishment of improved formal waste management infrastructure may assist in reducing illegal dumping and uncontrolled waste burning practices by providing lawful waste handling, recycling, composting, and disposal alternatives within the area. Such initiatives may therefore contribute indirectly toward broader local environmental improvement objectives within the surrounding airshed and municipal environment.

- Renewable energy investments

As part of broader operational optimisation and long-term sustainability initiatives, ArcelorMittal South Africa (“AMSA”) intends to develop a proposed solar photovoltaic facility with an anticipated generation capacity of up to **200 MW**.

Based on preliminary energy generation assessments, the proposed solar facility is anticipated to generate approximately **509.4 GWh per annum** at a P95 confidence level.

According to the Eskom 2022 Sustainability Report, Eskom emitted approximately **1 671 kilotons of SO₂** while generating approximately **198.3 TWh** of electricity during the reporting period. This equates to an estimated SO₂ emission intensity of approximately **8.427 tons of SO₂ per GWh generated**.

Based on this emission intensity factor, the proposed 200 MW solar facility could theoretically offset approximately:

$$\begin{aligned} 509.4 \text{ GWh/year} \times 8.427 \text{ tSO}_2/\text{GWh} \\ 509.4 \times 8.427 \approx 4292.3 \end{aligned}$$

This equates to an estimated theoretical avoidance of approximately **4 292 tons of SO₂ emissions per annum** associated with displaced grid-based electricity generation.

It is acknowledged that these avoided emissions would occur indirectly at electricity generation facilities within the national grid system rather than directly at the Vanderbijlpark Works itself, and that the actual displacement effect within the national electricity system may vary depending on broader electricity demand and dispatch conditions. The calculated reduction should therefore be regarded as a theoretical avoided emissions estimate associated with reduced dependence on grid-supplied electricity generated from predominantly coal-fired power stations.

Notwithstanding this limitation, the implementation of the proposed solar facility would contribute toward a reduction in the broader lifecycle environmental footprint associated with the Vanderbijlpark Works through increased utilisation of renewable energy sources and reduced reliance on fossil fuel-based electricity generation.

4.8. Existing SO₂ ambient air quality

Sulphur dioxide is an irritant gas, which is absorbed in the nose and aqueous surfaces of the upper respiratory tract, and is associated with reduced lung function and increased risk of mortality and morbidity. Adverse health effects of SO₂ include coughing, phlegm, chest discomfort, and bronchitis.

The national ambient air quality standard for sulfur dioxide (SO₂) in South Africa is 60 µg/m³ for annual averages and 80 µg/m³ for 24-hour averages. The actual measured SO₂ ambient concentrations from the Sedibeng Municipality Ambient air quality station located in Vanderbijlpark, (<https://saaqis.environment.gov.za>) is presented below.

Table 13 SO₂ Ambient standard

Pollutant	Averaging Period	NAAQS Concentration Limit (µg/m ³)	Permitted Frequency of Exceedance	2025 Measured Status / Exceedance
Sulphur Dioxide (SO ₂)	10 minutes	500	526	No exceedances reported
	1 hour	350	88	Limited exceedances recorded
	24 hour	125	4	Isolated exceedances recorded
	1 year	50	0	Annual average remained below the standard

Based on available 2025 monitoring information from the Sedibeng District Municipality monitoring network and the South African Air Quality Information System (SAAQIS). Available monitoring information indicates continued compliance with the annual SO₂ standard, with occasional short-term exceedances associated with episodic industrial and meteorological conditions

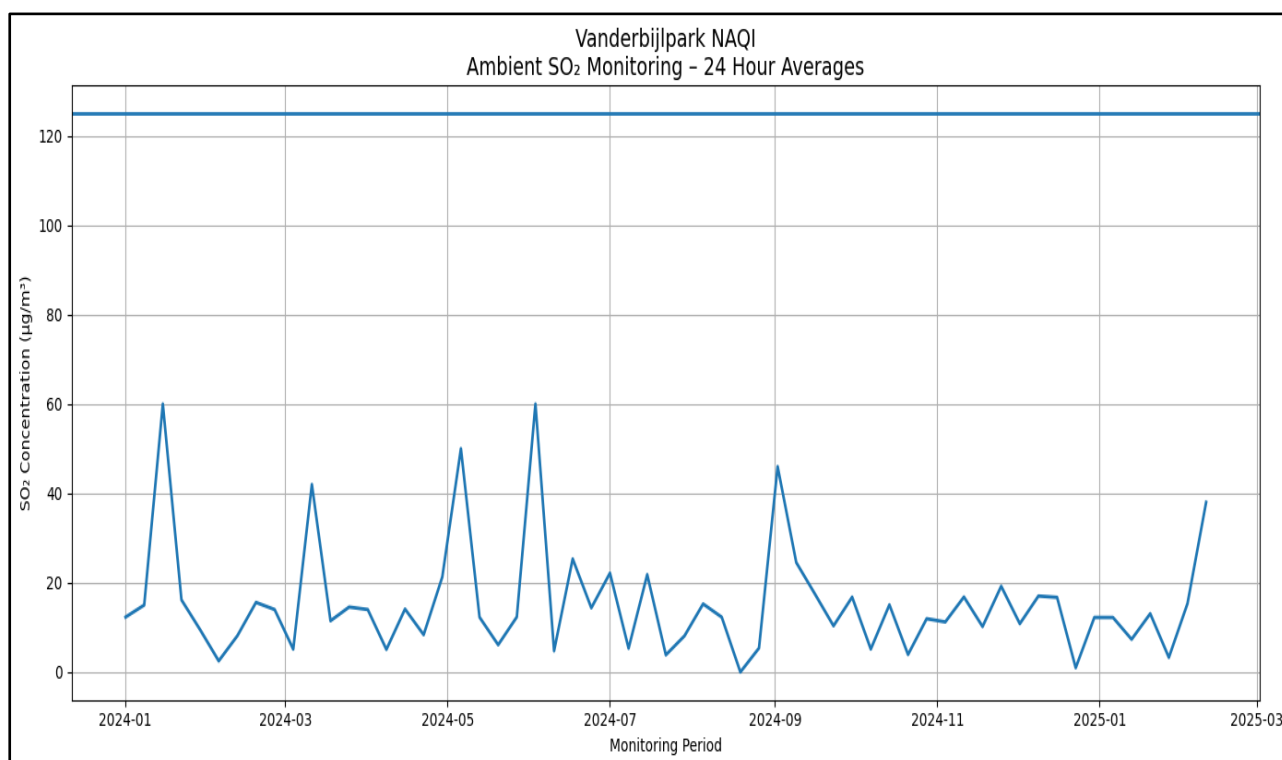


Figure 23: Ambient SO₂ measured in Vanderbijlpark

The updated 24-hour average SO₂ ambient monitoring graph for the Vanderbijlpark NAQI station indicates that measured ambient SO₂ concentrations during the 2024/2025 monitoring period remained well below the applicable South African National Ambient Air Quality Standard (NAAQS) of 125 µg/m³ for 24-hour averaging periods.

The monitoring results show that:

- Typical daily SO₂ concentrations generally ranged between approximately 5 and 30 µg/m³.
- Short-term elevated concentrations were periodically recorded, with isolated peaks approaching approximately 60 µg/m³.
- No exceedances of the 24-hour NAAQS limit of 125 µg/m³ were observed during the monitoring period presented.
- Ambient SO₂ concentrations remained substantially below the applicable compliance threshold throughout the assessment period.

The data therefore demonstrates continued compliance with the 24-hour ambient SO₂ standard at the Vanderbijlpark NAQI monitoring station, despite the presence of significant industrial activities within the Vaal Triangle Airshed Priority Area.

Over the last 12 months, no exceedance of the SO₂ Ambient air quality standard was measured by the District Municipality.

There is therefore compliance with the ambient standard in terms of SO₂.

4.9. Impacts on Ambient Air Quality

In order to quantify the impacts of the operations on the receiving environment, an Atmospheric Impact Report (AIR) was undertaken by Airshed Planning Professionals (Pty) Ltd (**Annexure B**), in which five (5) operational scenarios were assessed through atmospheric dispersion modelling simulations.

The modelling assessment considered the proposed operation of the Direct Reduction (DR) kiln stacks at an SO₂ emission concentration of 1 500 mg/Nm³ under the requested alternative emission limit scenario, together with the broader operational changes currently being implemented at ArcelorMittal South Africa. The modelling results indicate that operation of the kilns at the proposed alternative limit is not expected to result in a discernible increase in ambient SO₂ concentrations at identified sensitive receptor locations.

The assessment findings are supported by the available ambient monitoring data obtained from the Vanderbijlpark National Ambient Air Quality Monitoring (NAQI) station, which indicates that ambient SO₂ concentrations in the area remain substantially below the applicable South African National Ambient Air Quality Standards (NAAQS). The 2024/2025 ambient monitoring data demonstrates that measured 24-hour average SO₂ concentrations generally ranged between approximately 5 µg/m³ and 30 µg/m³, with isolated short-term peaks approaching approximately 60 µg/m³. Importantly, no exceedances of the applicable 24-hour NAAQS limit of 125 µg/m³ were recorded during the monitoring period assessed.

The ambient monitoring results therefore support the conclusions of the AIR that, despite the proposed alternative emission concentration for the kiln stacks, the combined operational configuration and ongoing emission reduction measures at the Vanderbijlpark Works are anticipated to maintain ambient SO₂ concentrations within the prescribed national ambient air quality standards. This demonstrates that the proposed alternative emission limit is unlikely to result in unacceptable ambient air quality impacts within the surrounding receiving environment.

Sensitive receptors assessed as part of the Atmospheric Impact Report ("AIR") and Community Health Risk Assessment ("HHRA") included surrounding residential areas, schools, healthcare facilities, old age homes, and other identified sensitive community receptors located within the study area surrounding the Vanderbijlpark Works.

The AIR specifically assessed predicted ambient pollutant concentrations at these sensitive receptor locations, while the HHRA evaluated the potential implications of ambient SO₂ exposure on community health outcomes, including vulnerable population groups such as children, the elderly, and individuals with pre-existing respiratory conditions.

The findings of the AIR and HHRA concluded that the predicted ambient SO₂ concentrations associated with the assessed operational scenarios remain below the applicable National Ambient Air Quality Standards and that the associated health risks at the assessed sensitive receptor locations remain insignificantly low.

The HHRA further concluded that implementation of the proposed alternative SO₂ emission limit of 1 500 mg/Nm³ for the Direct Reduction Kilns would not result in a material increase in community health risk at the assessed receptor locations, including the identified sensitive receptors within the surrounding communities.

It is noted that Regulation 12A(c)(ii) of Government Notice 893 (as amended) specifically requires that an Atmospheric Impact Report ("AIR") demonstrate that there will not be a material increased health risk in circumstances where no ambient air quality standard exists for the pollutant under consideration. In the present application, however, sulphur dioxide ("SO₂") is a regulated criteria pollutant for which National Ambient Air Quality Standards ("NAAQS") have already been formally established in South Africa.

Strictly interpreted, the primary applicable legal consideration for the current application therefore relates to Regulation 12A(c)(i), namely whether there is material compliance with the applicable National Ambient Air Quality Standards for SO₂ within the receiving environment. The undertaking of a detailed Community Health Risk Assessment (“HHRA”) was therefore not strictly required as a mandatory regulatory prerequisite for the present Section 12A application.

Notwithstanding this position, ArcelorMittal South Africa elected to voluntarily undertake both a comprehensive Atmospheric Impact Report and a detailed Community Health Risk Assessment in support of the application as part of a broader duty of care, transparency, and precautionary approach toward environmental management and stakeholder engagement.

The inclusion of the AIR and HHRA was intended to provide the Competent Authority, stakeholders, and surrounding communities with a more comprehensive understanding of the potential ambient air quality and community health implications associated with the proposed alternative SO₂ emission limit, notwithstanding the fact that ambient SO₂ standards already exist and are applicable within the study area. The specialist studies therefore provide additional technical support and environmental transparency beyond the minimum regulatory requirements applicable to the Section 12A application and demonstrate that the proposed alternative emission limit would not result in unacceptable ambient air quality impacts or a material increase in community health risk at the assessed sensitive receptor locations.

6. SUMMARY OF ATMOSPHERIC IMPACT REPORT (AIR) SPECIALIST STUDY

This section provides a summary of the Atmospheric Impact Report (AIR) specialist study that was generated by Airshed Planning Professionals (Pty) Ltd (Airshed) in support of the S12A application.

Refer to **Annexure B** of this report for a full copy of the for the specialist study.

6.1. Atmospheric Impact Report (AIR) Summary

An Atmospheric Impact Report ("AIR") was undertaken by Airshed Planning Professionals in support of the Section 12A application for an alternative SO₂ emission limit applicable to the Direct Reduction ("DR") Kilns at the ArcelorMittal South Africa Vanderbijlpark Works. The AIR was undertaken in accordance with the requirements of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA") and the applicable regulations governing Atmospheric Impact Reports and dispersion modelling assessments.

The purpose of the AIR was to assess the potential impacts of emissions associated with the Vanderbijlpark Works on the surrounding receiving environment and sensitive receptors, with specific focus on the proposed alternative SO₂ emission limit of **1 500 mg/Nm³** for the DR kilns. The assessment included a detailed emissions inventory review, atmospheric dispersion modelling assessment, meteorological analysis, ambient air quality review, and comparison of predicted ambient pollutant concentrations against the applicable National Ambient Air Quality Standards ("NAAQS").

The AIR assessed five operational scenarios representing historical, current, and future operational configurations of the Vanderbijlpark Works, namely:

- a 2018 baseline scenario representing higher production conditions;
- the current operational configuration following operational restructuring and coke battery shutdowns;
- future operational scenarios applying the proposed alternative SO₂ emission limit of 1 500 mg/Nm³ for the DR kilns;
- a future scenario assuming closure of all coke battery operations; and
- a theoretical future scenario assuming compliance with the new plant SO₂ emission standard of 500 mg/Nm³.

The dispersion modelling assessment evaluated the predicted ambient impacts associated with SO₂, NO₂, PM₁₀ and PM_{2.5} emissions at surrounding sensitive receptor locations, including residential areas, schools, and healthcare facilities located within the study area. The assessment incorporated site-specific meteorological data, prevailing wind conditions, operational emission inventories, and source-specific stack parameters.

The AIR concluded that the Vanderbijlpark Works remains a complex integrated steel manufacturing facility where the overall emissions profile is influenced not only by the DR kilns, but also by the broader operational configuration of the integrated steelworks, including coke oven operations, blast furnaces, sinter plants, fuel gas usage, and associated process operations.

The modelling results demonstrated that, under the revised future operational scenarios applying the proposed alternative SO₂ emission limit of **1 500 mg/Nm³**, meaningful reductions in overall works-wide SO₂

emissions can still be achieved through broader operational restructuring, plant rationalisation, reduced coke production capacity, and revised operational configurations.

The AIR further concluded that:

- the predicted ambient SO₂ concentrations associated with the assessed scenarios remain below the applicable National Ambient Air Quality Standards at the identified sensitive receptor locations;
- the proposed alternative SO₂ emission limit scenario does not result in unacceptable ambient air quality impacts;
- broader operational restructuring and plant rationalisation measures contribute materially toward reductions in overall works-wide SO₂ emissions; and
- the proposed alternative emission limit should be considered within the context of the overall integrated operational transition currently occurring at the Vanderbijlpark Works.

The AIR also confirmed that the Vanderbijlpark Works is located within the Vaal Triangle Airshed Priority Area, where particulate matter remains one of the primary pollutants of concern within the airshed. Ambient monitoring information reviewed as part of the AIR indicated that ambient SO₂ conditions within the area generally remain within the applicable ambient air quality standards.

Based on the findings of the dispersion modelling assessment, the AIR supports the conclusion that the proposed alternative SO₂ emission limit of **1 500 mg/Nm³** for the DR kilns would remain acceptable from an ambient air quality perspective when considered together with the broader operational restructuring and emissions reduction measures currently being implemented at the Vanderbijlpark Works.

6.2. Results of Model

The modelling assessment demonstrated that the predicted ambient SO₂ concentrations associated with all assessed scenarios remain below the applicable National Ambient Air Quality Standards (“NAAQS”) at the identified sensitive receptor locations within the study area.

The baseline scenario representing the 2018 operational period produced the highest overall plant-wide SO₂ emission load due to higher production rates and the operation of multiple coke batteries and associated ironmaking facilities.

The current operational scenario reflected the revised operational configuration following the shutdown of Coke Batteries 6, 7, 8 and 9 and demonstrated changes in the emissions profile associated with reduced coke production and revised fuel gas usage patterns.

Under the future operational scenarios applying the proposed alternative SO₂ emission limit of 1 500 mg/Nm³ for the DR kilns, the modelling results demonstrated that meaningful reductions in overall works-wide SO₂ emissions can still be achieved through broader operational restructuring, reduced coke production capacity, plant rationalisation, and revised operational configurations across the Vanderbijlpark Works.

The modelling further indicated that the future operational scenario where Coke Battery 4 is no longer operational results in additional reductions in overall SO₂ emissions and associated ambient concentrations.

The theoretical scenario assuming compliance with the new plant SO₂ emission standard of 500 mg/Nm³ for the DR kilns produced the lowest predicted SO₂ concentrations and overall emissions load. However,

the assessment acknowledged that achieving this emission standard at the DR kilns is currently considered technically impracticable and economically unsustainable under the current operational conditions applicable to the Vanderbijlpark Works.

The dispersion modelling assessment therefore concluded that:

- the proposed alternative SO₂ emission limit scenario does not result in exceedances of the applicable ambient air quality standards at the assessed sensitive receptor locations;
- broader operational restructuring and plant rationalisation measures contribute toward reductions in overall works-wide SO₂ emissions;
- the proposed alternative emission limit of 1 500 mg/Nm³ for the DR kilns remains acceptable from an ambient air quality perspective; and
- the overall future operational strategy contributes toward progressive reductions in the total emissions profile associated with the Vanderbijlpark Works.

Isopleth plots are presented for annual averaging periods, ground-level SO₂ concentrations for ArcelorMittal Vanderbijlpark Works is represented below;

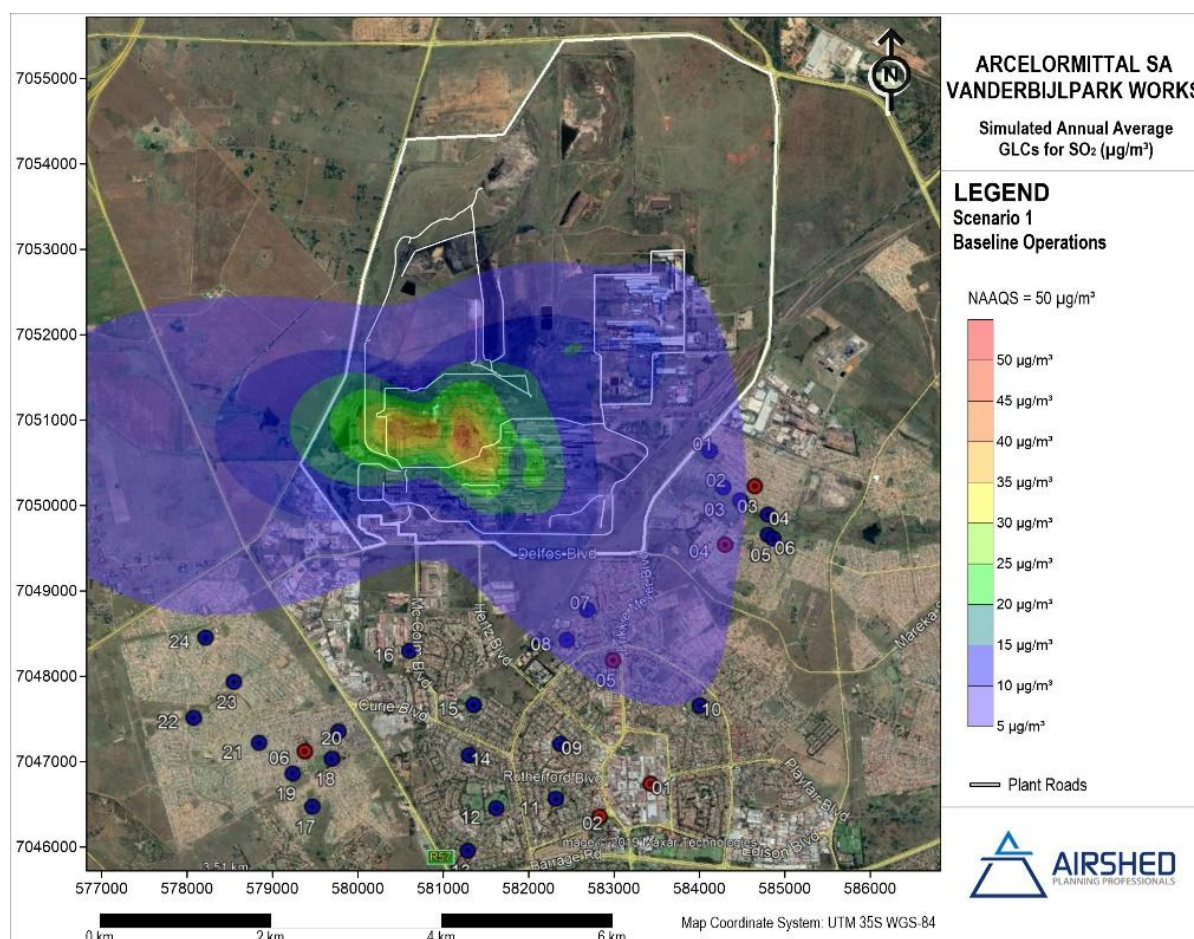


Figure 24: Simulated annual SO₂ concentrations as a result of baseline emissions

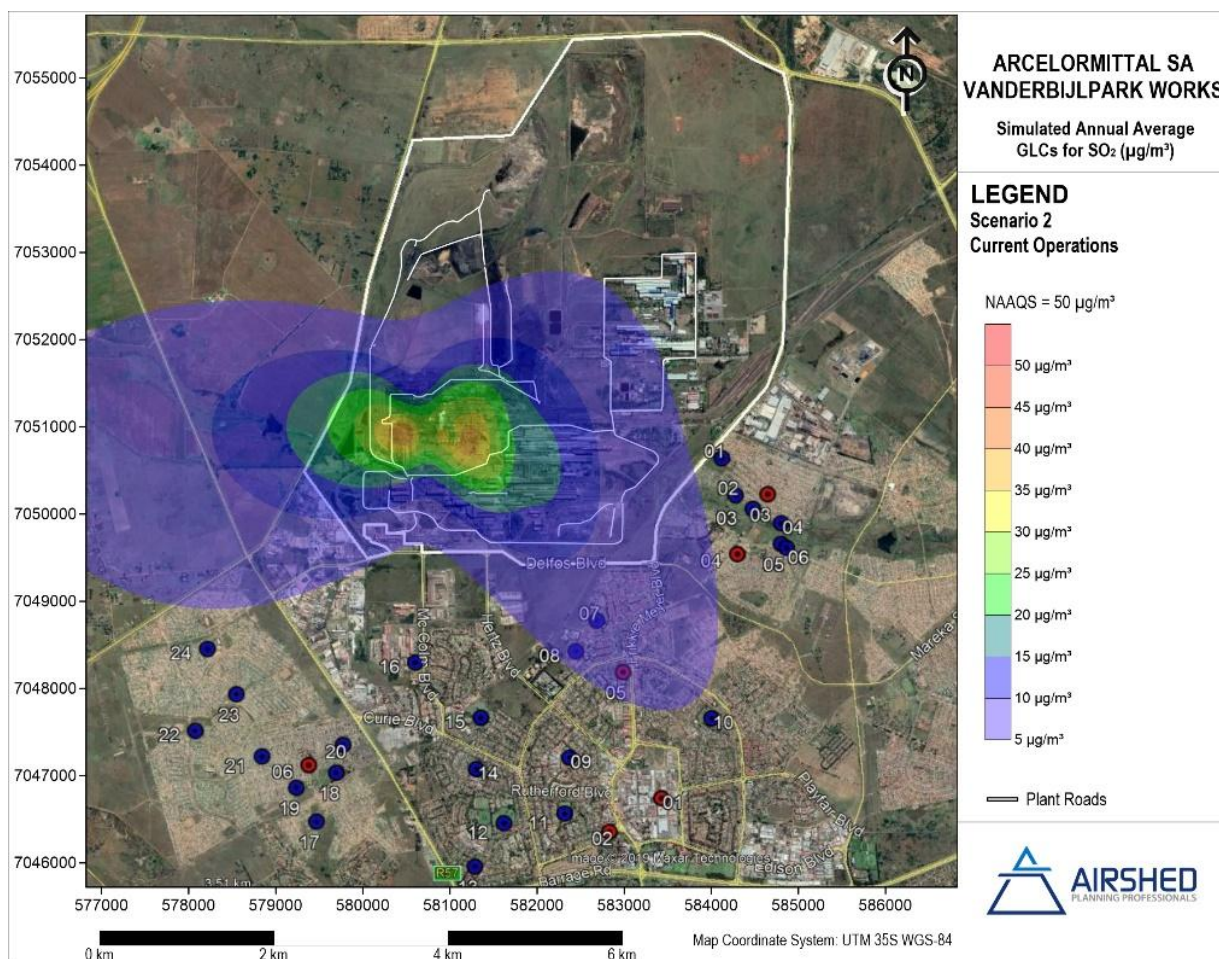


Figure 25: Simulated annual SO₂ concentrations as a result of current emissions (scenario 2)

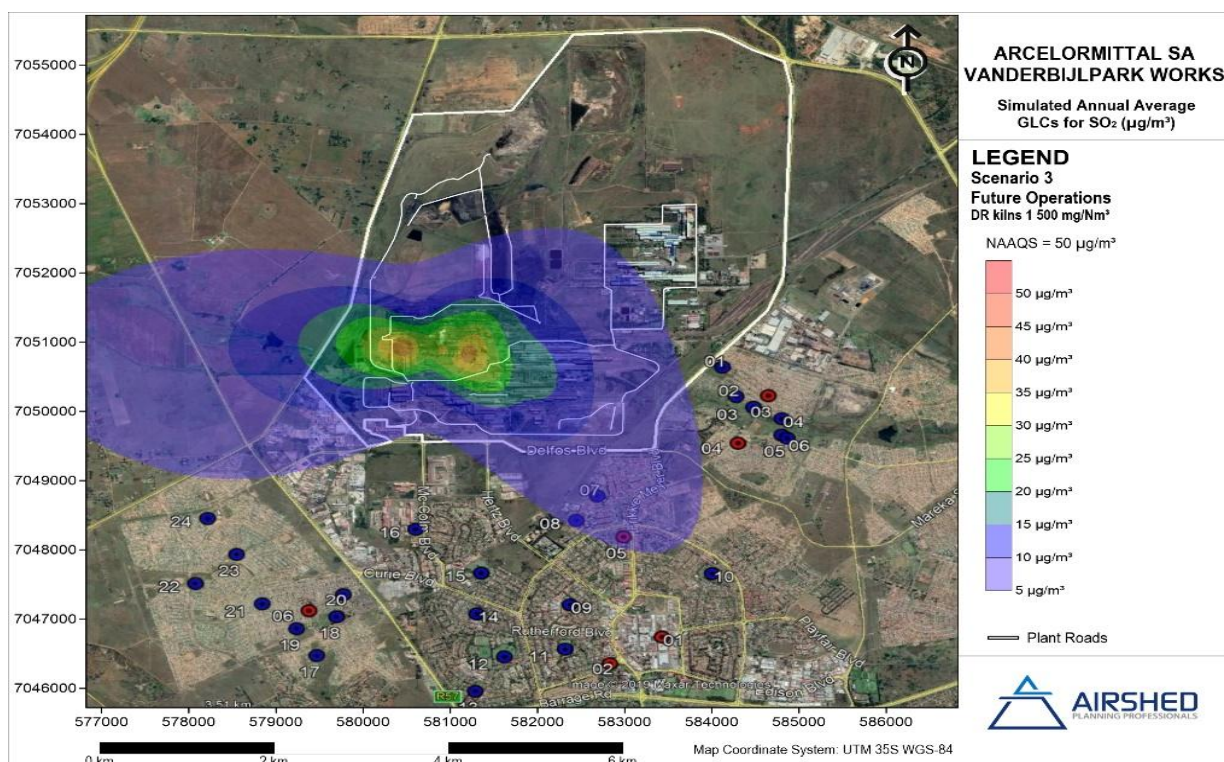


Figure 26: Simulated annual SO₂ concentrations as a result of future emissions (scenario 3)

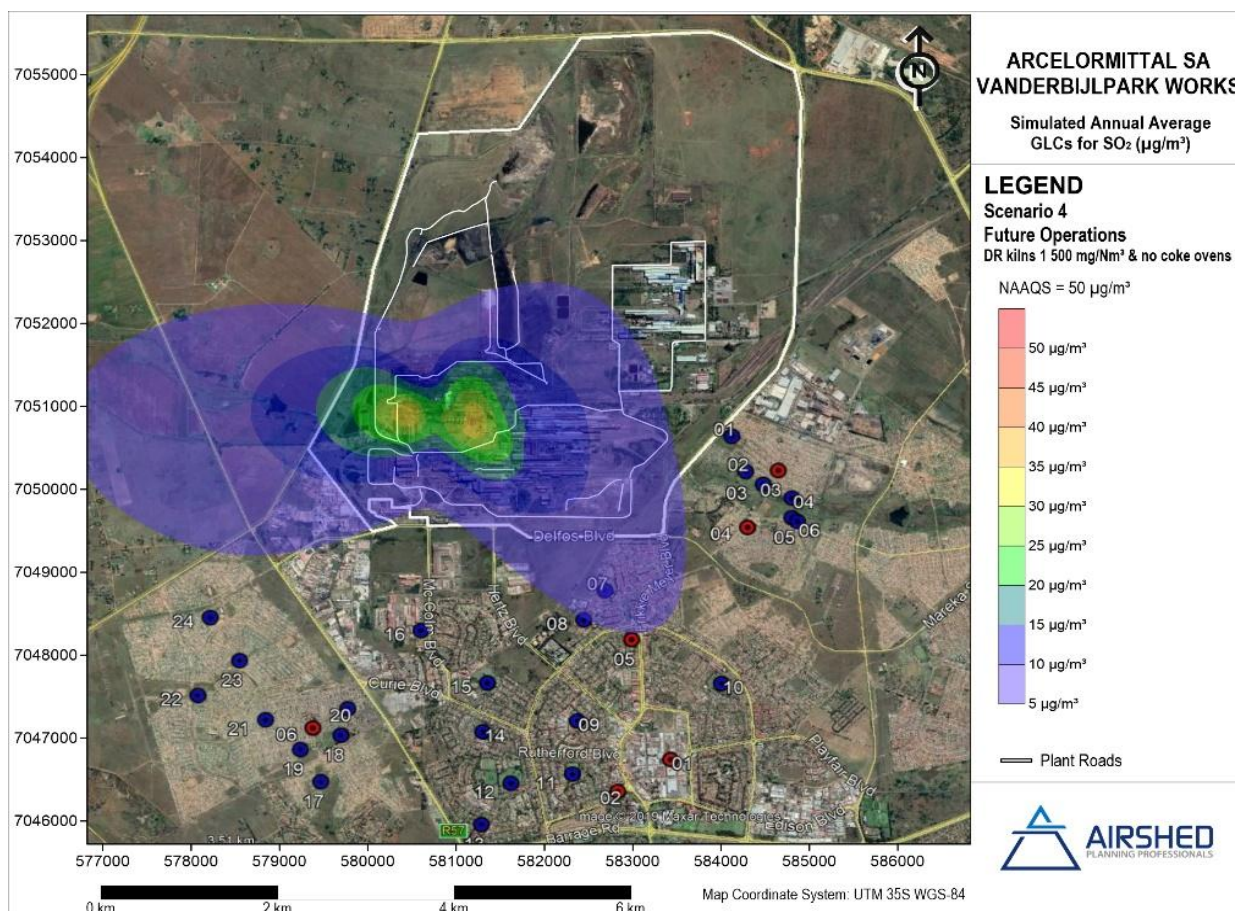


Figure 27 Simulated annual SO₂ concentrations as a result of future emissions (scenario 4)

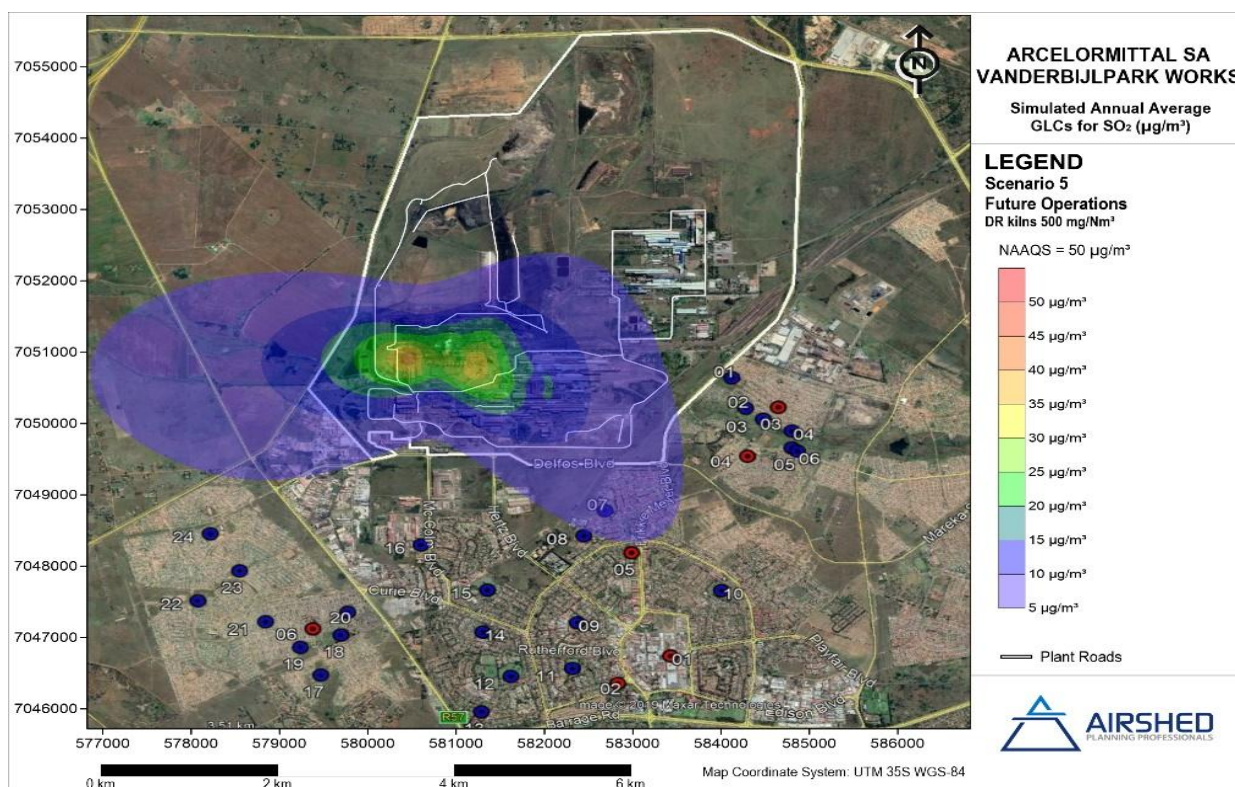


Figure 28 Simulated annual SO₂ concentrations as a result of future emissions (scenario 5)

While the Atmospheric Impact Report (“AIR”) utilised the AERMOD dispersion modelling system in accordance with the Regulations Regarding Air Dispersion Modelling published under the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), concerns were raised during the previous public participation process regarding the potential conversion of sulphur dioxide (“SO₂”) to secondary sulfate particulates and associated PM_{2.5} impacts.

In this regard, it is important to note that AERMOD remains the accepted regulatory dispersion model applied in South Africa for near-field industrial atmospheric impact assessments where the greatest impacts are expected within approximately 50 km from the source. The modelling domain and assessment methodology utilised in the AIR were therefore considered appropriate and consistent with the applicable South African regulatory modelling framework for the Vanderbijlpark Works application.

7. SUMMARY OF THE HEALTH RISK ASSESSMENT

ArcelorMittal South Africa commissioned INFOTOX (Pty) Ltd to undertake a Community Health Risk Assessment (“HHRA”) in support of the Section 12A application for an alternative SO₂ emission limit applicable to the Direct Reduction (“DR”) Kilns at the Vanderbijlpark Works. The HHRA was undertaken in conjunction with the Atmospheric Impact Report (“AIR”) prepared by Airshed Planning Professionals and specifically evaluated the potential community health implications associated with exposure to ambient SO₂ concentrations under the various operational scenarios assessed as part of the application.

The AIR primarily assessed ambient air quality impacts in relation to compliance with the National Ambient Air Quality Standards (“NAAQS”), while the HHRA specifically evaluated the potential implications of the predicted SO₂ concentrations on community health outcomes at sensitive receptor locations surrounding the Vanderbijlpark Works.

The HHRA assessed the potential increase in health risks associated with exposure to ambient SO₂ concentrations, including potential impacts relating to asthma exacerbation and natural mortality. The assessment utilised internationally recognised epidemiological risk assessment methodologies based on attributable fractions (“AFs”), which represent the fraction of cases within an exposed population that may theoretically be attributable to exposure to a particular pollutant source.

The HHRA concluded that the attributable fractions associated with asthma exacerbation and natural mortality at all assessed receptor locations remained insignificantly low under all assessed operational scenarios, including the proposed alternative SO₂ emission limit scenario of 1 500 mg/Nm³ for the DR kilns. The calculated attributable fractions generally fell within ranges regarded as insignificantly different from current or background health risks for practical purposes.

The assessment further concluded that implementation of the proposed alternative SO₂ emission limit would not result in a material increase in community health risk associated with ambient SO₂ exposure at the assessed sensitive receptor locations surrounding the Vanderbijlpark Works.

The HHRA additionally reviewed ambient SO₂ monitoring data recorded at the Vanderbijlpark Monitoring Station within the study area between 2021 and 2025. The monitored ambient SO₂ concentrations remained below the applicable National Ambient Air Quality Standards for both daily and annual averaging periods during the monitoring period.

The assessment further considered prevailing wind conditions and atmospheric dispersion patterns within the study area and concluded that the contribution of the Vanderbijlpark Works to ambient SO₂ concentrations measured within the surrounding residential areas is insignificant relative to broader regional ambient conditions.

The HHRA also considered the potential implications associated with conversion of SO_2 to SO_3 and sulfate particulates and concluded that these effects are inherently incorporated within the epidemiological studies used to quantify SO_2 -related health risks. The assessment concluded that any such conversion would not materially alter the low ambient particulate concentrations modelled within the AIR assessment.

The Section 12A application further relates specifically to the assessment of compliance with the applicable SO_2 National Ambient Air Quality Standards (“NAAQS”) and associated community health implications linked to SO_2 exposure.

The Community Health Risk Assessment (“HHRA”) undertaken by INFOTOX specifically considered concerns relating to the potential conversion of SO_2 to sulfate particulates and concluded that the epidemiological studies used within the risk assessment inherently incorporate the health implications associated with secondary sulfate formation. The HHRA further concluded that potential sulfate particulate formation would not materially alter the already low ambient particulate concentrations predicted within the AIR assessment or result in a material increase in community health risk at the assessed receptor locations.

Overall, the HHRA concluded that the community health risks associated with ambient SO_2 concentrations under all assessed operational scenarios, including the proposed alternative emission limit scenario of 1 500 mg/Nm^3 for the DR kilns, remain insignificant and would not result in a material increase in health risks at the surrounding receptor locations. The report is attached in **Annexure C**.

8. PUBLIC PARTICIPATION

AMSA VDB has appointed Zantow Environmental Consulting Services to undertake a Public Participation Process (PPP) for the above-mentioned application. According to Section (2)(4)(f) and (o) of the National Environmental Management Act (Act 107 of 1998) – “NEMA” (as amended):

- the participation of all Interested and Affected Parties (I & APs) in environmental governance must be promoted and people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation;
- Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge;
- the environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people’s common heritage.

In order to give effect to the above-mentioned principles, it is essential to ensure that there is adequate and appropriate opportunity for public participation in decisions that may affect the environment. In this regard, Zantow Environmental Consulting Services considered the PPP guideline (as revised) as contemplated in Section 24J of the NEMA to ensure for a comprehensive and inclusive participation and commenting during the PPP for the above application.

The public participation process have included the following:

- Placement of an advertisement in two (2) newspapers in the area.
- Placement of site notices visible to the public.
- Email and or Post distribution of written notices and a Background Information Document to the current registered and identified IAP’s;
- Circulation the draft application report and supporting AIR for review by the public as well as relevant authorities for comment; and
- All comments received have been responded to and incorporated in a comments and response report which will form part of the final report which will be submitted to the Competent Authority for final consideration.

The records confirming proof of the public participation process are attached to the final application report under **Annexure D**.

8.1. Stakeholder Identification

Stakeholders identified in previous environmental authorisation processes undertaken by ArcelorMittal Vanderbijlpark Works in the Vanderbijlpark area, together with the lists of stakeholders that ArcelorMittal Vanderbijlpark has regular contact with, and networking and referral formed the basis for the development of the stakeholder database. All stakeholders that registered in the previous S12A application was automatically included in the register.

The stakeholder database for the ArcelorMittal Vanderbijlpark comprised of stakeholders, representing various sectors of society as per examples below. Refer to **Annexure D1** for the full database of stakeholders:

- National Government: Such as The Department of Environment Affairs, Forestry and Fisheries (DFFE)
- Gauteng Department of Agriculture, Rural Development and the Environment (GDARDE)
- District Government: Sedibeng District Municipality

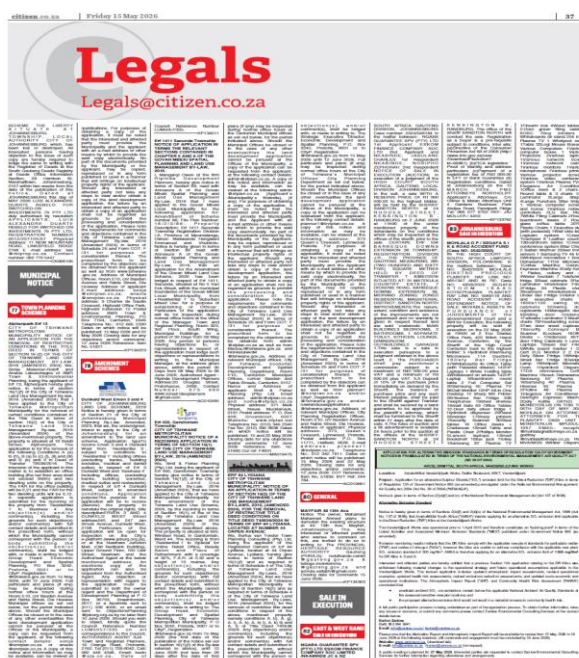
- Local Government: Emfuleni Local Municipality
- NGOs and interest groups: Groundworks, VEJA, Centre for Environmental Rights LACROPA
- Parastatals: Telkom, Transnet, Randwater, Spoornet.
- Adjacent and surrounding landowners and private residents.
- The database also includes a list of registered I&APs (see **Annexure D1**) as per the requirement in Chapter 6, (55.1) specified in NEMA.

The database was reviewed and updated after each round of engagement during the application process. The registered IAPs will be consulted as the application process progresses.

8.2. Placement of an Advertisement in News Papers

Two (2) advertisements have been placed with local newspapers (**Annexure D5**). The aim of the legal notices is to notify the potential I&APs of the application and proposed project.

The public commenting period was announced on the 15th May 2026 and provided opportunity for any party to register as an Interested Affected Party, provide access to the reports and request participation. The participation period has been set to run for a minimum of 30 days until the 16th June 2026.



Newspaper advert: The Citizen



Newspaper advert: Vaalweekblad

8.3. Written Notices

Written notices along with a Background Information Document (BID) have been provided to potential I&APs by means of the following methods:

- E-mails
- Mail
- Hand delivered

Emails were sent to identified IAPs in addition to notices hand delivered to identified stakeholders around the site. Refer to **Annexure D3** for proof of written notice distribution.

Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: 'mjekane@dfre.gov.za'; 'pgwaze@dfre.gov.za'; 'tramaru@dfre.gov.za'; 'pgasela@dfre.gov.za'; 'jwiti@dfre.gov.za'; 'smangold@dfre.gov.za'; 'Skaba@dfre.gov.za'; Ricca Marowe; 'DMAKHUBLE@dfre.gov.za'
Cc: Karen Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Delivery	Read
	'mjekane@dfre.gov.za'		
	'pgwaze@dfre.gov.za'		
	'tramaru@dfre.gov.za'		
	'pgasela@dfre.gov.za'		
	'jwiti@dfre.gov.za'		
	'smangold@dfre.gov.za'		
	'Skaba@dfre.gov.za'		
	Ricca Marowe		
	'DMAKHUBLE@dfre.gov.za'		
	Karen Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/16 11:27

Dear Interested and Affected Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa ("AMSA") operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

The Vanderbijlpark Works was legally operational prior to 1 April 2010 and therefore constitutes an "existing plant" in terms of the Listed Activities and Associated Minimum Emission Standards ("MES") published under Government Notice 893 (as amended) in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEMAQA").

The facility currently operates under Atmospheric Emission Licence ("AEL") Reference Number AEL0003/SDM/2012 issued by the Sediberg District Municipality.

Emission monitoring results indicate that the Direct Reduction ("DR") Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter ("PM") and oxides of nitrogen ("NO_x"). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to DR Kilns 4, 5 and 6.

1

Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: admin@sheetmetal.com; lubber@iafrica.com; admin@sccostal.co.za; domento@mweb.co.za; info@deltabrics.co.za; office@tmradio.co.za; info@dcd.co.za; enquiries@emas.co.za; reception@mm-med.co.za
Cc: Karen Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Delivery	Read
	admin@sheetmetal.com		
	lubber@iafrica.com		
	admin@sccostal.co.za		
	domento@mweb.co.za		
	info@deltabrics.co.za		
	office@tmradio.co.za		
	info@dcd.co.za		
	enquiries@emas.co.za		
	reception@mm-med.co.za		
	Karen Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/19 04:44

Dear Interested and Affected Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa ("AMSA") operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

The Vanderbijlpark Works was legally operational prior to 1 April 2010 and therefore constitutes an "existing plant" in terms of the Listed Activities and Associated Minimum Emission Standards ("MES") published under Government Notice 893 (as amended) in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEMAQA").

The facility currently operates under Atmospheric Emission Licence ("AEL") Reference Number AEL0003/SDM/2012 issued by the Sediberg District Municipality.

Emission monitoring results indicate that the Direct Reduction ("DR") Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter ("PM") and oxides of nitrogen ("NO_x"). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to DR Kilns 4, 5 and 6.

1

Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: sandy.pillay@greif.com; info@kqb.co.za; connie@connieshouse.co.za; admin@jokkers.co.za; pieter@pakwe.co.za; louw@pakwe.co.za; manager.vdb@envirocycle.global; info@maltech.co.za; info@thurost.co.za
Cc: Karen Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Read
	sandy.pillay@greif.com	
	info@kqb.co.za	
	connie@connieshouse.co.za	
	admin@jokkers.co.za	
	pieter@pakwe.co.za	
	louw@pakwe.co.za	
	manager.vdb@envirocycle.global	
	info@maltech.co.za	
	info@thurost.co.za	
	Karen Zantow	Read: 2026/05/19 04:44

Dear Interested and Affected Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

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1

Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: sindane@gmail.com; fantismoleleki@yahoo.com; rastj@yahoo.com; ojolao@gmail.com; malapela.phineas@gmail.com; Minkiemimah@yahoo.com; zodwam23@gmail.com; blakdove@gmail.com; rinda.v.d.menwe@gmail.com; NicolineSW19870309@gmail.com; siphweepsu@gmail.com
Cc: Karen Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Delivery	Read
	sindane@gmail.com		
	fantismoleleki@yahoo.com		
	ojolao@gmail.com		
	malapela.phineas@gmail.com		
	Minkiemimah@yahoo.com		
	zodwam23@gmail.com		
	blakdove@gmail.com		
	rinda.v.d.menwe@gmail.com		
	NicolineSW19870309@gmail.com		
	siphweepsu@gmail.com		
	Karen Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/19 04:44

Dear Interested and Affected Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa ("AMSA") operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

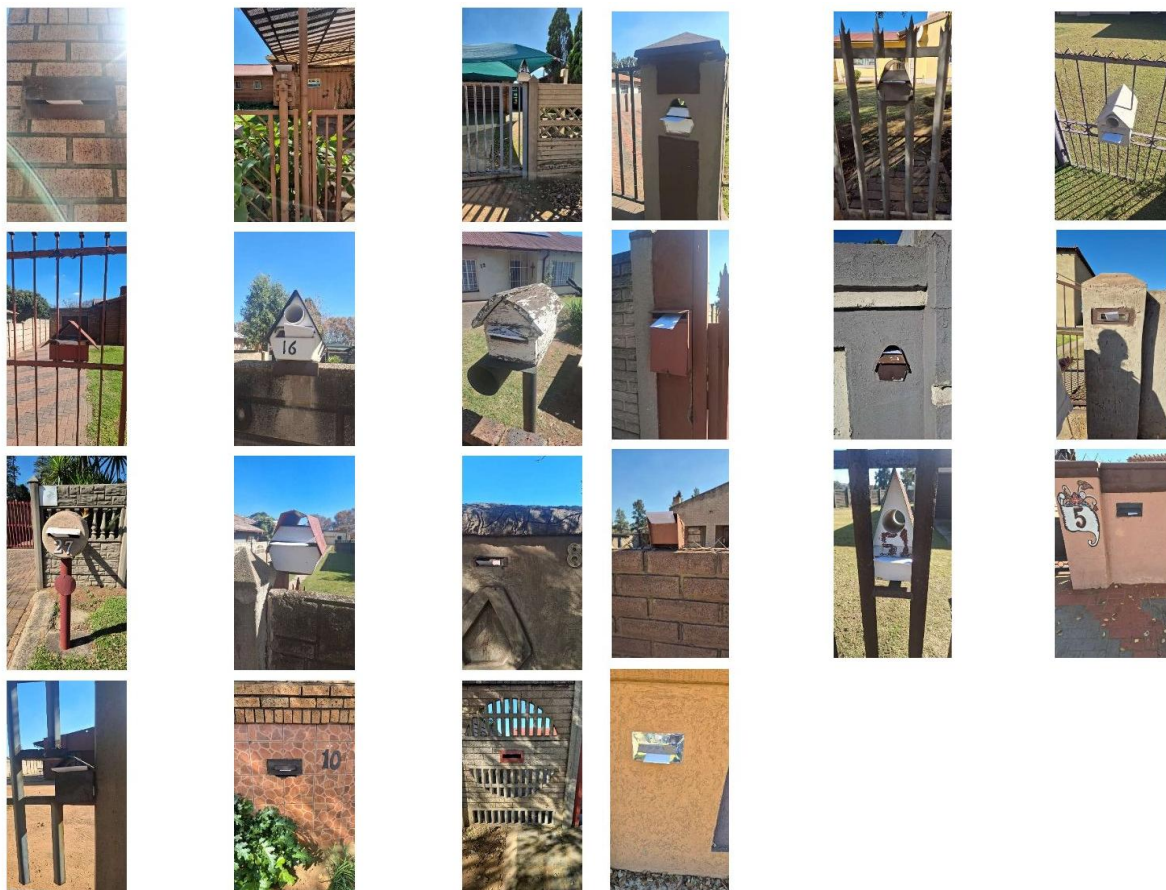
The Vanderbijlpark Works was legally operational prior to 1 April 2010 and therefore constitutes an "existing plant" in terms of the Listed Activities and Associated Minimum Emission Standards ("MES") published under Government Notice 893 (as amended) in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEMAQA").

The facility currently operates under Atmospheric Emission Licence ("AEL") Reference Number AEL0003/SDM/2012 issued by the Sediberg District Municipality.

Emission monitoring results indicate that the Direct Reduction ("DR") Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter ("PM") and oxides of nitrogen ("NO_x"). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

1

Proof of written notice and BID distribution to IAPs via email



Proof of written notice and BID distribution to IAPs via mailboxes

zantow
environmental consulting services

ACKNOWLEDGEMENT OF RECEIPT OF NOTICE OF APPLICATION FOR AN ALTERNATIVE SO, EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

Applicant: ArcelorMittal South Africa Limited, Vanderbijlpark Works
Date: 15 May 2026

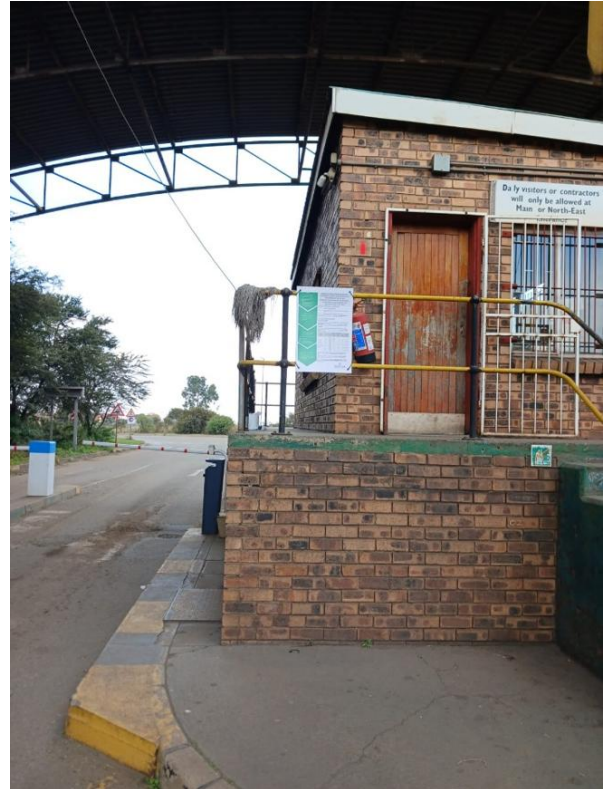
Name & Surname	Organisation/Private Individual	E-mail address	Signature
Jacob Rappin		ve_0715982207	<i>[Signature]</i>
Sam Rapse		radibac@577@2000.com	<i>[Signature]</i>
Moshe Khumalo	Individual	Matkhuma@gmail.com	<i>[Signature]</i>
Lehlohonolo	Monitoring	Lehlohonolo@Monitoring.com	<i>[Signature]</i>
King Makoma	Individual	Spring Block Slava	<i>[Signature]</i>
Chonore Mashone		N/A	<i>[Signature]</i>
Suzan Seorane	Angels Practice DCC	bofohle@gmail.com	<i>[Signature]</i>

Name & Surname	Organisation/Private Individual	E-mail address	Signature
<i>F. Gwading</i>			<i>[Signature]</i>
<i>Rp. Nkhumisa</i>			<i>[Signature]</i>

Register for written notice and BID hand deliveries

8.4. Site Notice

A site notice was also placed at two (2) site entrances of the facility (refer to **Annexure D4** for a copy of the site notice).



Proof of site notice placement at AMSA Vanderbijlpark

8.5. Public Meeting

A public meeting was held on the **27th May 2026** at Stonehaven on Vaal. One session was arranged for the morning (09:00 – 11:00) and a second in the afternoon (17:00 to 19:00) to accommodate persons restricted during working hours. This created an opportunity for stakeholders to engage in person and allow all comments and concerns to be record and documented.

ARCELORMITTAL VANDERBIJLPARK WORKS SOUTH AFRICA SECTION 12A APPLICATION IN TERMS OF REGULATION GN 893

ArcelorMittal South Africa is the largest maker of long and flat steel products in Africa with its Vanderbijlpark Works producing flat steel products. The ArcelorMittal Vanderbijlpark Works, located in the heavy industrial area (NW7) of Vanderbijlpark has been in operation for more than 80 years.



The ArcelorMittal Vanderbijlpark Works holds a valid Atmospheric Emissions License (AEL 0003/SDM/2012) (AEL) as issued by the Sedibeng District Municipality on the 29th September 2023.

The following Listed Activities published in GN 893 (as amended) in terms of Section 21 of the National Environmental Management, Air Quality Act, 2004 (Act No. 39 of 2004) are therefore authorised:

NEMAQA S21 -

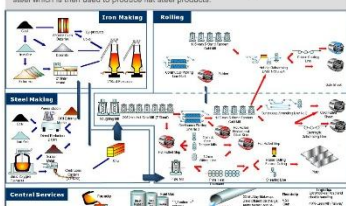
- Subcategory 1.4: Gas Combustion Installations
- Subcategory 3.1: Combustion Installations
- Subcategory 3.3: Tar Processes
- Subcategory 4.2 Combustion Installations
- Subcategory 4.3: Sinter Plants
- Subcategory 4.6: Basic Oxygen Furnaces
- Subcategory 4.7: Electric Arc Furnaces (Primary and Secondary)
- Subcategory 4.8: Blast Furnaces
- Subcategory 4.10: Foundries
- Subcategory 4.11: Agglomeration Operations
- Subcategory 4.12: Pre-Reduction and Direct Reduction
- Subcategory 4.22: Hot Dip Galvanising
- Subcategory 5.1: Storage and Handling of Ore and Coal
- Subcategory 7.2: Production of Acids

The Works is an integrated Steel Manufacturing facility that produces a wide range of flat steel products by affixing a series of primary and secondary processes, each with different input materials.

Raw material such as iron ore, coal, scrap metal, alloys, rolling materials, and other materials are used to produce a range of flat steel products.

The ArcelorMittal Vanderbijlpark Works covers approximately 2 450 ha in extent and is sited as Industrial Type 2, which permits industrial activity, and the disposal of residue generated.

ArcelorMittal South Africa, Vanderbijlpark Works is an integrated steel works. The operations are made up of several industrial processes which combine to form the great operations. The first phase of operations is focused on iron making which is then converted to steel which is then used to produce flat steel products.

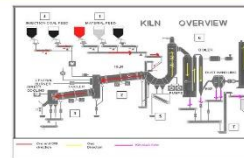


ARCELORMITTAL VANDERBIJLPARK WORKS SOUTH AFRICA DRI KILNS AND APPROVED EMISSION LIMITS

The Direct Reduction route is an alternative iron making route, which utilizes coal to reduce iron ore. At Vanderbijlpark Works, six rotary kilns are used to heat iron ore, coal and additives to produce sponge iron, which is then utilized in the blast furnaces and the steel making plant.

The waste gases from the process are drawn off the process and sent through a waste heat boiler to generate process steam. Dust particles are removed from the waste gas stream in the Electrostatic Precipitator (ESP), before the waste gas is discharged to atmosphere through the main stack. An emergency stack is also located between the kiln and the boiler which is only used during upset conditions.

This serves as a safety device for the boiler, should there be an unplanned boiler outage, and would result in pollution generation for the time that it takes to put the kiln process offline. There are presently 6 kiln / boiler trains in operation.



ArcelorMittal Vanderbijlpark Works was in operation prior to 1 April 2010 and is therefore regarded as an "existing plant" in terms of GN 893 which contains the Minimum Emissions Standards (MES) in terms of NEMAQA.

- Existing plants were required to comply with the MES for new plants by 1 April 2020 unless otherwise specified or subject to a postponement.
- On the 29th March 2019, ArcelorMittal was granted a once off postponement with the alternative emission standards at the DRI Kilns.

NEMAQA S21 Category	Appliance	Postponement / Alternative Timeframe	Pollutant	MES (mg/Nm ³) New Plant (2020)	Postponement / Alternative Emission Limit (mg/Nm ³)	Current Emissions
Subcategory 4.12: Pre-reduction and Direct Reduction	DR kiln stack 1	2020-2025	Sulphur dioxide (SO ₂)	500	800	±1 130
	DR kiln stack 4				500	±1 130
	DR kiln stack 5				700	±1 130
	DR kiln stack 6				750	±1 130

SO₂ emissions from the DRI Kiln Stacks indicate that the new plant levels cannot be achieved, an alternative limit is being requested.



ARCELORMITTAL VANDERBIJLPARK WORKS SOUTH AFRICA DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS

Stack emissions monitoring results between 2020 to 2025 indicate that all PM and NO_x emissions at the DRI Kilns are compliant with the MES for new plants, however SO₂ emission levels have not been able to achieve the MES for new plants nor the alternative limit as approved in terms of the postponement granted on the 29th March 2020.

Paragraph 12(A) of GN 893 as amended to state that:

- a. "An existing plant may submit an application regarding a new plant standard to the National Air Quality Officer for consideration if the plant is in compliance with other emission standards but cannot comply with a particular pollutant or pollutants."
- b. "An application must demonstrate a previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards."
- c. "The National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if:
 - i. there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or
 - ii. the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard."

MOTIVATION AND APPLICATION PROCESS

Paragraph 12(A) of GN 893 as amended, requires the applicant (ArcelorMittal Vanderbijlpark Works) to provide an application with motivation on the following requirements:

- Compliance levels to other pollutants emission limits at the DRI Kilns
- Previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.
- Acceptable ambient air quality for the pollutant in question compared to the National ambient air quality standards in the area
- An Atmospheric Impact Report which indicates the increased health risk where there is no ambient air quality standard

In order to achieve the required goal, ArcelorMittal must first apply for alternative emission limits at the DRI Kilns in terms of SO₂.

NEMAQA S21 Category	Appliance	Postponement / Alternative Timeframe	Minimum Emission Standards (mg/Nm ³)	Requested Alternative Emission Standard
Subcategory 4.12: Pre-reduction and Direct Reduction	DR kiln stack 1	1 April 2025 Up to April 2025	Sulphur dioxide (SO ₂)	Plant shut down
	DR kiln stack 2			Plant shut down
	DR kiln stack 3			Plant shut down
	DR kiln stack 4			1 500 mg/Nm ³
	DR kiln stack 5			1 500 mg/Nm ³
	DR kiln stack 6			1 500 mg/Nm ³



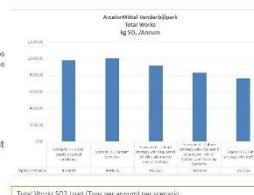
ARCELORMITTAL VANDERBIJLPARK WORKS SOUTH AFRICA DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS ATMOSPHERIC IMPACT REPORT

Regulation 12A of GN 893 stipulates that the competent authorities can approve the alternative emissions, if there is no material exceedance of the ambient air quality limits for the particular pollutant in question (i.e. SO₂) and where there is no ambient standard "the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard".

In order to assist the competent authority decision making process as well as stakeholder engagement, an Atmospheric Impact Report (AIR) was undertaken by Airshed Planning Professionals (Pty) Ltd in support of the application for alternative Emission Standards.

It is anticipated that each source identified above will require five scenarios to be modelled, in order to establish the delta impacts against the baseline, i.e.:

- Scenario 1 – Baseline Actual Conditions
- Scenario 2 – Current Operational Scenario
- Scenario 3 – Future Operational Strategy with Alternative Emission Limit of 1 500 mg/Nm³
- Scenario 4 – Future Operational Scenario without Coke Battery 4
- Scenario 5 – Future Operational Scenario Assuming MES Compliance at the DRI Kilns



The shutdown of certain plants, have and will result in the reduced emission load emitted.

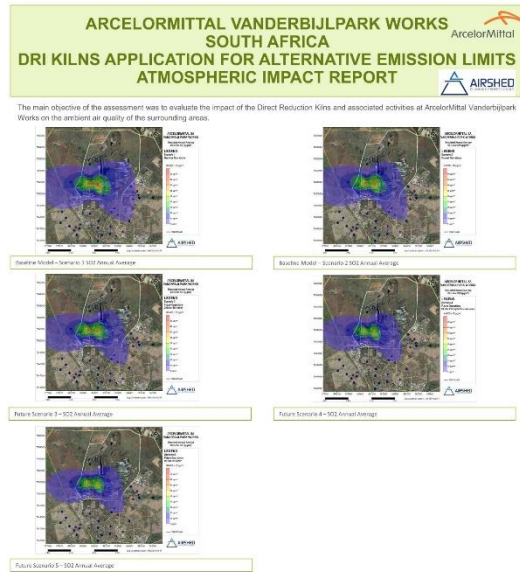
- Shut down of Coke Oven Battery 6 (2024)
- Shut down of Coke Oven Battery 7 (2024)
- Shut down of Coke Oven Battery 8 (2025)
- Shut down of Coke Oven Battery 9 (2025)

Changes in process flow and plants to optimise operations.

- Operate 3 x DRI Kilns (2 operated with 1 on standby and maintenance) at alternative emission limits.
- Operate only 1 Coke Battery (Battery 4) in its current state until 2040, whereafter it will be decommissioned.
- Import all required coke from outside of South Africa.

Changes in the previous decarbonisation strategy

- No longer planning to construct two new Coke Batteries.
- No longer planning to construct and commission a new Gas Cleaning and Desulphurisation plant.
- No longer proposes to construct a new Electric Arc Furnace (EAF) and operate only two of the three BOF furnaces.
- No longer planning to decommission part of the iron making facilities.



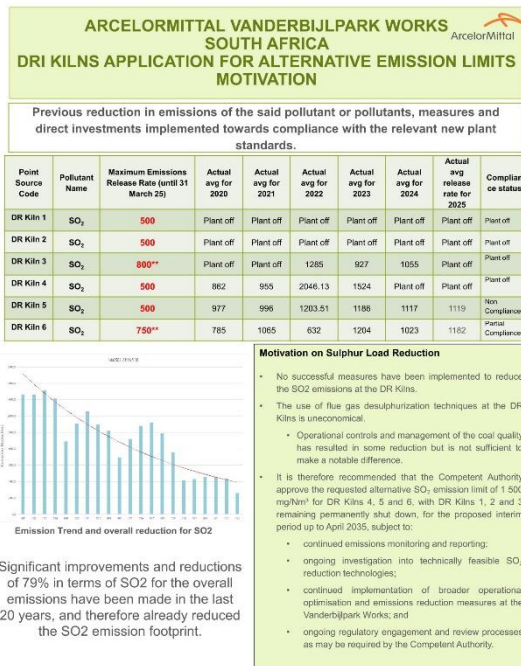
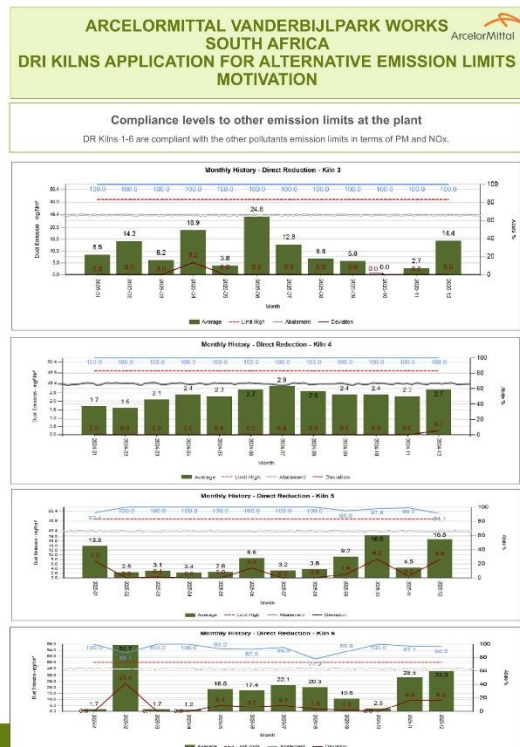
Summary and Conclusion of AQIR

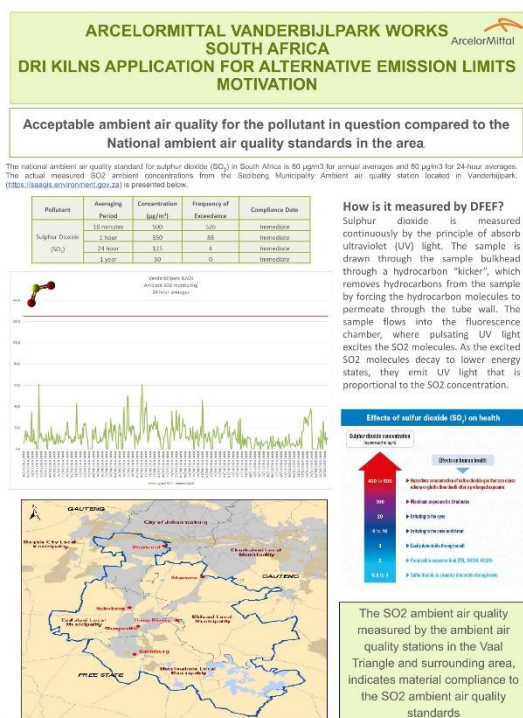
- The scenarios will result in a decrease of ground-level SO₂ concentrations (on the average at the selected receptors for annual) of 12%, 18%, 25% and 27% for scenario 2, 3, 4 and 5 respectively.
- Dispersion modelling shows that simulated concentrations at all AQSRs would be within NAAQS for all the scenarios.



Summary and Conclusion of Health Risk Assessment

- Modelled results for SO₂ releases from all sources at the ArcelorMittal Vanderbijlpark Works, with emissions from the DR kilns set at the proposed MES of 1 500 mg/Nm³ for some of the scenarios, indicated insignificant health risks at all receptor locations.
- Overall, it can be concluded that community health risks due to ambient air concentrations of SO₂ at the receptor locations would be insignificant for all release scenarios from the ArcelorMittal Vanderbijlpark Works if the alternative MES of 1 500 mg/Nm³ is applied.





Public meeting posters

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environmental consulting services

PUBLIC PARTICIPATION MEETING FOR THE APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 983 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

Venue: Stonehaven
Time: 9:00 to 11:00
Applicant: ArcelorMittal South Africa Limited, Vanderbijlpark Works
Date: 27 May 2020

Name & Surname	Organisation/Private Individual	E-mail address	Signature
Zack Kakeke	Estimote Services	zack.kakeke@estimote.com	[Signature]
Robert Mkhabela	VEJA	robert.mkhabela@veja.co.za	[Signature]
T. Mashe	VEJA	t.mashe@veja.co.za	[Signature]
P. Mkhaka	VEJA	p.mkhaka@veja.co.za	[Signature]
Mkhosi Mkhabela	VEJA	mkhosi.mkhabela@veja.co.za	[Signature]
Rand Ngweni	VEJA	rand.ngweni@veja.co.za	[Signature]
Stacey Tshepo	VEJA	stacey.tshepo@veja.co.za	[Signature]
G. Mkhabela	ANSA	g.mkhabela@ansa.co.za	[Signature]
Phisoani Mphahlele	VEJA	phisoani.mphahlele@veja.co.za	[Signature]

Name & Surname	Organisation/Private Individual	E-mail address	Signature
J. Hadebe	ANSA	j.hadebe@ansa.co.za	[Signature]

Public meeting attendance register



Good day Richard,

Hope you are well.

Please find attached posters as requested.

Kind Regards
Benj v.d. Merwe



Benj van der Merwe
Administrator
T: 082 300 3536 F: 016 932 4976
E: info@zantow.co.za
www.zantow.co.za

DISCLAIMER

[illegible]

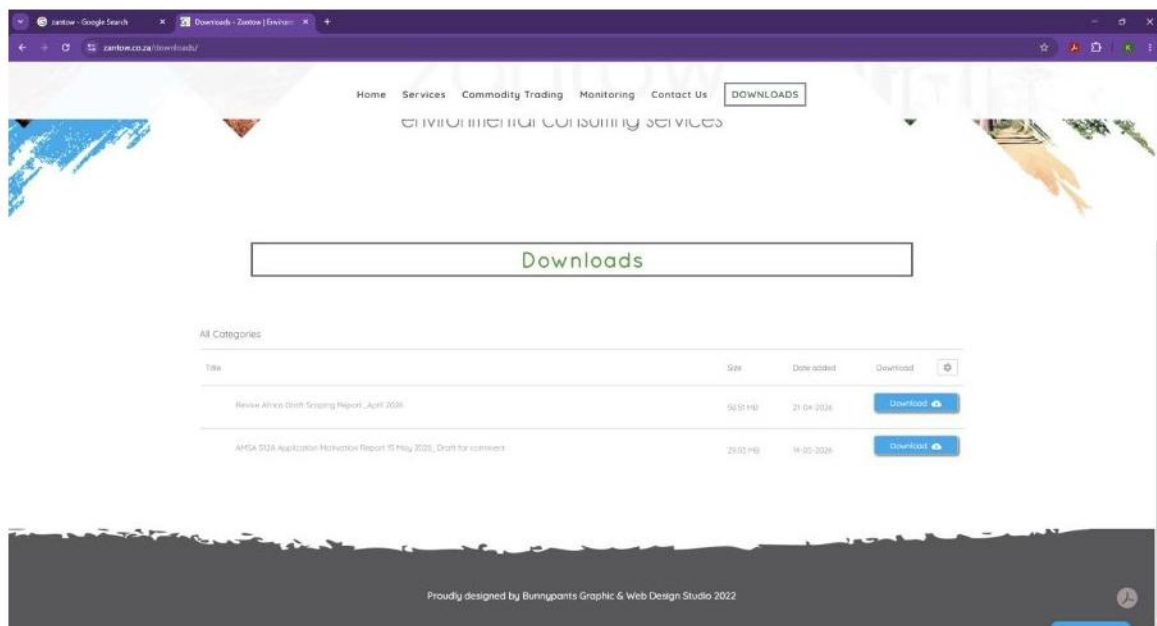


Public meeting photographs

8.6. Circulation of the Relevant Documents

The application and supporting documents were made available for review from the 15th of May 2026 to the 15th of June 2026 at the following locations:

- Hard copy: Emfuleni Library & ArcelorMittal security gate
- Electronic copy: www.zantow.co.za
- Email: info@zantow.co.za (on request)



Proof of placement on website



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environmental consulting services

A hard copy and electronic copy of the document has been provided to the Sedibeng District Municipality Air Quality Officer, GDARD Air Quality Division and to the National Air Quality Officer for comment (**Annexure D7**).

8.7. Comments and Response Report

The comments received during the public participation period include comments from the Centre of Environmental Rights (CER) on behalf of the Vaal Environmental Justice Alliance (“**VEJA**”) attached to **Annexure D8**.

The response report to comments received is attached in **Annexure D9**.

8.8. Register of I&APs

A register was maintained of all the identified I&APs which is attached in **Annexure D1**.

9. CONCLUSION

The ArcelorMittal South Africa Vanderbijlpark Works operates as an integrated iron and steel manufacturing facility of strategic importance to the South African industrial economy and broader manufacturing value chain. The facility remains a significant producer of flat steel products and supports substantial downstream industrial activities, infrastructure development, employment opportunities, and associated regional economic activity.

The Vanderbijlpark Works constitutes an “existing plant” in terms of Government Notice 893 (as amended) and is therefore subject to the applicable Minimum Emission Standards (“MES”) promulgated under the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (“NEM:AQA”). While the Direct Reduction (“DR”) Kilns have demonstrated compliance with the applicable new plant standards for particulate matter (“PM”) and oxides of nitrogen (“NOx”), emissions monitoring results confirm that the kilns remain unable to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³ under current operational conditions and available technically feasible mitigation measures.

It is further recognised that ArcelorMittal South Africa did not consistently achieve the alternative SO₂ emission limits approved under the previous postponement granted in March 2020. However, it is important to distinguish between the alternative emission limits requested by ArcelorMittal and those ultimately approved by the Competent Authority. During the postponement application, ArcelorMittal demonstrated, based on the technical information available at the time, that an alternative emission limit of **1 700 mg/Nm³** represented the lowest technically achievable concentration for the Direct Reduction Kilns. The Competent Authority, however, approved substantially lower alternative emission limits ranging between **500 mg/Nm³ and 800 mg/Nm³** for the individual kilns. Operational experience gained during the postponement period, together with additional technology investigations, hydrated lime injection trials and operational optimisation measures, has confirmed that these approved alternative limits are not technically achievable under the existing process configuration.

The present application should therefore not be viewed as a continuation of the previous postponement, but rather as a new application submitted in terms of Regulation 12A, supported by updated technical evidence, revised operational assumptions, an updated Atmospheric Impact Report and Community Health Risk Assessment, and a comprehensive reassessment of the technically achievable emission performance of the Direct Reduction Kilns. The requested alternative emission limit of **1 500 mg/Nm³** reflects ArcelorMittal's current best assessment of a technically achievable emission level, while still demonstrating acceptable ambient air quality impacts, insignificant incremental community health risks and continued reductions in the overall works-wide SO₂ emissions.

Extensive technical investigations, operational assessments, and emissions reduction evaluations undertaken by ArcelorMittal South Africa have demonstrated that implementation of the flue gas desulphurisation technologies required to achieve the applicable new plant SO₂ emission standard at the DR kilns would require substantial capital-intensive infrastructure and significant ongoing operational expenditure. Based on the investigations undertaken, such technologies are presently considered technically impracticable and economically unsustainable within the current operational and financial context applicable to the Vanderbijlpark Works.

The current application has further demonstrated that ArcelorMittal South Africa has consistently implemented operational optimisation measures, plant rationalisation initiatives, and broader emissions reduction interventions over an extended period of time. Historical emissions trend analysis confirms that overall SO₂ emissions associated with the Vanderbijlpark Works have reduced substantially since 2005 through the shutdown of coke batteries, operational restructuring, infrastructure upgrades, reduced gas consumption, and broader operational optimisation initiatives.

Importantly, the revised operational strategy currently being implemented at the Vanderbijlpark Works, including the shutdown of Coke Batteries 6, 7, 8 and 9, revised operational configurations, and reduced coke production capacity, will continue contributing toward measurable reductions in the overall works-

wide SO₂ emissions profile, notwithstanding the continued operation of the DR kilns under the proposed alternative emission limit scenario. The scenario assessment undertaken as part of this application demonstrates that meaningful reductions in overall plant wide SO₂ emissions can still be achieved under the revised future operational configurations assessed.

The specialist studies undertaken in support of this application further provide strong technical support for the proposed alternative emission limit. The Atmospheric Impact Report (“AIR”) concluded that the predicted ambient SO₂ concentrations associated with the assessed operational scenarios remain below the applicable National Ambient Air Quality Standards (“NAAQS”) at the identified sensitive receptor locations within the study area. The AIR further confirmed that the revised operational strategy and plant rationalisation measures contribute toward reductions in the overall works-wide emissions profile.

The Community Health Risk Assessment (“HHRA”) undertaken by INFOTOX concluded that implementation of the proposed alternative SO₂ emission limit of 1 500 mg/Nm³ for the DR kilns would not result in a material increase in community health risk at the assessed receptor locations. The assessment confirmed that the attributable fractions associated with asthma exacerbation and natural mortality remain insignificantly low and that the associated health risks remain insignificantly different from current or background health risks under all assessed operational scenarios.

The Vanderbijlpark Works is located within the Vaal Triangle Airshed Priority Area, where particulate matter remains one of the primary pollutants of concern within the airshed. The available ambient monitoring information and the findings of the AIR and HHRA indicate that ambient SO₂ concentrations within the surrounding area remain generally within the applicable ambient air quality standards and that the proposed alternative emission limit would not result in unacceptable ambient air quality impacts or material increases in community health risk.

In addition, the socio-economic implications associated with the continued operation of the Vanderbijlpark Works and the DR kilns remain significant. The facility supports approximately 3 750 permanent employees together with substantial indirect employment, contractors, downstream supply chains, and associated industrial activities. Refusal of the requested alternative emission limit may place the continued operation of the DR kilns and broader Vanderbijlpark operations at significant risk, with potentially severe socio-economic implications for the region and broader domestic steel industry.

The public participation period for review and comment on the Draft Section 12A Application commenced on 15 May 2026 and concluded on 15 June 2026. Written notices and Background Information Documents (BIDs) were distributed to registered Interested and Affected Parties (I&APs) via email, postal mail and hand delivery. The Draft Application and supporting specialist reports were made available for public review on the Zantow Environmental Consulting Services website, at the ArcelorMittal Vanderbijlpark Works main gate, and at the Vanderbijlpark Public Library. Copies of the Draft Application were also submitted to the Sedibeng District Municipality, Emfuleni Local Municipality, the Provincial Air Quality Officer and the competent authority, the Department of Forestry, Fisheries and the Environment (DFFE), for review and comment.

A public open day was held on 27 May 2026 at Stonehaven on Vaal. To maximise accessibility and encourage stakeholder participation, two information sessions were conducted, comprising a morning session from 09:00 to 11:00 and an afternoon session from 17:00 to 19:00. The sessions provided stakeholders with an opportunity to engage directly with ArcelorMittal South Africa and the specialist team, ask questions regarding the application and supporting studies, and raise comments or concerns for consideration.

During the public participation period, written comments were received from the Centre for Environmental Rights (CER) on behalf of the Vaal Environmental Justice Alliance (VEJA), while additional comments and questions were raised during the public open day by community members and other Interested and Affected Parties. The principal issues raised related to the legal applicability of Regulation 12A, the technical feasibility of complying with the Minimum Emission Standards, the adequacy of the Atmospheric Impact Report and Community Health Risk Assessment, potential health impacts on surrounding communities, secondary particulate formation from sulphur dioxide, climate

change and decarbonisation commitments, socio-economic considerations, employment impacts, and the alignment of the application with the objectives of the Vaal Triangle Airshed Priority Area Air Quality Management Plan.

All comments, objections and questions received during the public participation process were carefully considered and evaluated. Where appropriate, the Motivation Report, Atmospheric Impact Report and Community Health Risk Assessment were reviewed and expanded to provide additional technical information, clarification and supporting evidence. A comprehensive Comments and Responses Report has been prepared and accompanies this application, documenting each comment received together with ArcelorMittal South Africa's response and cross-references to the relevant sections of the final reports. The final application has therefore been updated to address all substantive comments raised during the public participation process.

A register of Interested and Affected Parties (I&APs) has been maintained throughout the public participation process and will continue to be updated for the duration of the application. All registered I&APs will be informed of significant milestones, decisions and future opportunities for participation in accordance with the applicable public participation requirements.

Based on the technical investigations undertaken, the findings of the specialist studies, the demonstrated historical reductions in emissions, the broader operational restructuring currently being implemented, and the environmental, operational, and socio-economic considerations applicable to the Vanderbijlpark Works, it is concluded that the requested alternative SO₂ emission limit of **1 500 mg/Nm³** for the Direct Reduction Kilns represents a balanced, reasonable, and environmentally justifiable interim regulatory outcome.

It is therefore recommended that the Competent Authority approve the requested alternative SO₂ emission limit of **1 500 mg/Nm³** for DR Kilns 4, 5 and 6, with DR Kilns 1, 2 and 3 remaining permanently shut down, for the proposed interim period up to April 2035, subject to:

- continued emissions monitoring and reporting;
- ongoing investigation into technically feasible SO₂ reduction technologies;
- continued implementation of broader operational optimisation and emissions reduction measures at the Vanderbijlpark Works; and
- ongoing regulatory engagement and review processes as may be required by the Competent Authority.

The requested alternative emission limit accordingly represents the most realistic and proportionate approach currently available to balance environmental protection, technical feasibility, operational sustainability, and socio-economic stability within the context of the Vanderbijlpark Works and the broader objectives of NEM:AQA and the Vaal Triangle Airshed Priority Area Air Quality Management Plan.

Annexure D1

Initial IAP Register & Registered IAP's

Annexure D-1 Initial IAP Register

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
DEPARTMENTS AND LOCAL AUTHORITIES						
Department of Forests, Fisheries & Environment (DFFE)	Mr Maesela Kekana	Deputy Director Air Quality Management	012 399 9108	mjekane@dffe.gov.za	Private Bag X447, Pretoria, 0001	
Department of Forests, Fisheries & Environment (DFFE)	Dr Patience Gwaze	Director: Air Quality Management	012 399 9192	pgwaze@dffe.gov.za	Private Bag X447, Pretoria, 0001	
Department of Forests, Fisheries & Environment (DFFE)	Mr Tlou Ramaru	Director: Climate Change Adaption	012 399 9252	tramaru@dffe.gov.za	Private Bag X447, Pretoria, 0001	
Department of Forests, Fisheries & Environment (DFFE)	Ms Pemy Gasela	Director: International Climate Change Relations and Negotiations	012 399 9182	pgasela@dffe.gov.za	Private Bag X447, Pretoria, 0001	
Department of Forests, Fisheries & Environment (DFFE)	Mr Jongikhaya Witi	Director: Climate Change Monitoring and Evaluation	012 399 9048	jwiti@dffe.gov.za	Private Bag X447, Pretoria, 0001	
Department of Forests, Fisheries & Environment (DFFE)	Mr Stuart Mangold	Director: International Governance and Resource Mobilisation	012 399 9243	smangold@dffe.gov.za	Private Bag X447, Pretoria, 0001	
Gauteng Department of agriculture Land Reform & Rural Development (GDRD)	Ms Lydia Muditambi	Director: Air Quality Management	011 240 3193	lydia.muditambi@gauteng.gov.za	56 Eloff Street, Umnotho House, JOHANNESBURG	
Sedibeng District Municipality	Michael Nemangaya	District Air Quality Officer	016 450 3233	Michaeln@sedibeng.gov.za	PO Box 471 Vereeniging, 1930	
Sedibeng District Municipality	Ndivhudzanyi Nesane	AEL Coordinator and Permitting	083 649 2400	NesaneN@sedibeng.gov.za	PO Box 471 Vereeniging, 1930	
Emfuleni Local Municipality	Aseef Ahmed	Environmental Management Officer	0826513106	AseefA@emfuleni.gov.za	P O Box 3 Vanderbijlpark, 1900	
Emfuleni Local Municipality	Johannes Mabena	Environmental Management Officer	082 651 3106	zanim@emfuleni.gov.za	P O Box 3 Vanderbijlpark, 1900	
Emfuleni Local Municipality	Mr Sikhula	Emfuleni Ward 17 councillor	0692445837	mthuras30@gmail.com	P O Box 3 Vanderbijlpark, 1900	
Emfuleni Local Municipality	Gerda Senekal	Emfuleni Ward councillor	076 616 2124	counciltalkconsultants@gmail.com		
SURROUNDING LANDOWNERS / COMMUNITY MEMBERS AND RESIDENTS						
Aquarella Investments 389 (Pty) Ltd	Alande Ndlela	Mine Compliance Coordinator	066 243 2109	andlela@ceramic.co.za	-	-
Aquarella Investments 389 (Pty) Ltd	Victor Lupuwana	Mine manager	074 634 4454	victor@aquarellainvest.co.za	-	-
Ceramic Industries (Pty) Ltd	Tshifhiwa Mundalamo	Environmental Coordinator	073 3649 750	mmohlabe@ceramic.co.za	-	-

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
Cape Gate (Pty) Ltd	Mannei Mamba	Environmental Officer	071 481 7441	Mannei.Mamba@capegate.co.za	-	-
Ferrous HP Engineering				joe@ferrous.co.za		
Air Products	Edgar Webb	UHS Field Manager	016 986 8678	Edgar.Webb@Airproducts.co.za	Private Bag 784090 Sandton 2146	
Air Products	Sue Nicholls	Corporate risk coordinator	016 986 8678	Sue.Nicholls@airproducts.co.za	Private Bag 784090 Sandton 2146	
AfriSam Vanderbijlpark	Neels Venter	SHE Practitioner	011 758 6040	neels.venter@za.afrisam.com	-	
AfriSam Vanderbijlpark	Bongs Malindi	SHE Practitioner	083 335 9016	Bongani.Malindi@za.afrisam.com	-	
Consolidated Wire Industries (CWI)	Mr Coetzer		016 980 3111	tshidi@cw-wire.co.za	6 Telford St, N. E. 3, Vanderbijlpark, 1911	
Consolidated Wire Industries (CWI)	Johannes Botha	-	016 988-1522	Sheqsupport@cw-wire.co.za	P O Box 102, Vanderbijlpark, 1910	
Consolidated Wire Industries (CWI)				cwi@sheqmanagement.co.za annatjie@sheqmanagement.co.za	P O Box 102, Vanderbijlpark, 1910	
Collect a Can	UBC Branch	-	016 988 1330	johann@collectacan.co.za	P O Box 790, Vanderbijlpark, 1900	Yes
Nampak Div Food	-	-	016 950 3000	johanna.swanepoel@za.nampak.com	3 Nobel Blvd, Vanderbijlpark N. E. 3, Vanderbijlpark, 1900	
Wheatfields Investments No 216	-	-	-	-	PO Box 271 Vanderbijlpark, 1900	
VICVA Investments and Trading 42 (Pty) Ltd	-	-	016 455 3453	hjooste@gjarch.co.za	-	
Kearleys Transport (Pty) Ltd	-	-	016 986 1233	admin@kearleys.co.za	38 Fairbanks Street Vanderbijlpark, 1911	
Clotan Steel	Hertzog Badenhorst	-	016 986 8000	contact@clotansteel.co.za	130 Hertz Blvd, Vanderbijlpark, 1900	
DJ afvalpapier	-	-	016 986 2158	admin@djafvalpapier.co.za	7 Firestone Street Vanderbijlpark, 1900	
Global Binders	-	-	016 986 3053	reception@globalroadbinders.com	28 Febriek St, Vanderbijlpark, 1900	

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
Vecor Park Vanderbijlpark	-	-	-	jp@fedpropcc.co.za	-	
VESCO group	-	-	0168899825	michelle@vesco.co.za	PO Box 1 Vanderbijlpark, 1900	
Grinaker Lta	-	-	-	VanWyk@grinaker-lta.co.za	202 Hertz Blvd, Vanderbijlpark C. W. 5, Vanderbijlpark, 1901	
Air Products	-	-	016 910 3111	info@airproducts.co.za	-	
Takis Biltong	-	-	016 986 8698	orders@takisbiltong.co.za	P O Box 1174, Vanderbijlpark, 1900	
Malitech	-	-	-	info@malitech.co.za	-	
Prosper timbers	-	-	-	prospertimber@hotmail.com	-	
Fancraft	-	-	-	info@fancraft.co.za	-	
Afrox	-	-	-	customer.service@afrox.linde.com	-	
Hencor Scrapyard	-	-	-	hencorscrapyard@telkomsa.net	-	
Pinnacle Metals Elements 2426 (Pty) Ltd	Dawid Bisschoff	-	081 433 0680	dawid@casenviro.co.za	11 Delfos Boulevard, Vanderbijlpark, 1901	
Sedgeshelf	Peet Mostert	-	083 321 1035	peet@casenviro.co.za	11 Delfos Boulevard, Vanderbijlpark, 1901	
Bumatech	Sam Hewitt	-	016 986 0331	sam@bumatech.co.za	P. O. Box 20, Henbyl, 1903 6 Leland Street, NW7 Vanderbijlpark	
Elca Engineering	Frank Binder	-	016 910 7300	elca@elca.co.za	P O Box 607, Vanderbijlpark, 1901	
Ferrous High Precision Engineering	Giuseppe Cadamuro	-	016 986 0721	joe@ferrous.co.za	P O Box 2450, Vanderbijlpark, 1900	
Conveyor Splicing Services	Shawn Chesworth	-	016 362 3491	sales@conveyorsplicing.co.za	P O Box 263800, Vanderbijlpark, 1900	
Hydro Oil Cooling company	-	-	016 986 1172	willie@hydroc.co.za	P O Box 3251, Vanderbijlpark, 1910	
Stuarts & Lloyds	-	-	016 981 2038	belindam@sltrading.co.za	P O Box 3446, Vanderbijlpark, 1910	

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
ISC Metal	-	-	016 986 1189	natalie@iscgroup.co.za	P O Box 3268, Vanderbijlpark, 1910	
DELJ Engineering & Construction	-	-	016 981 0971	vaaltool@mweb.co.za	P O Box 3097, Vanderbijlpark, 1910	
JH Sheet Metal	-	-	016 933 2856	admin@jhsheetmetal.com	P O Box 2866	
Pro-Mining Engineering and Construction Brokers	-	-	016 986 3880	lubber@iafrica.com	PO Box 3794, Vanderbijlpark, 1900	
ISC Coastal Construction	-	-	016 986 1002	admin@isccoastal.co.za	P.O. Box 4129, Vanderbijlpark, 1910	
Domento Mechanical Services	-	-	016 986 2774	domento@mweb.co.za	22 Michelin Street, Vanderbijlpark, 1910	
Delta Bricks	-	-		info@deltabricks.co.za	PO Box 2710, Vanderbijlpark, 1910	
IFM radio	-	-	016 889 2014	office@ifmradio.co.za	-	
DCD Engineering	-	-	016 428 0000	info@dcd.co.za	PO Box 186, Vanderbijlpark, 1910	
IEMAS Financial Services	-	-		enquiries@iemas.co.za	-	
LMM	-	-	016) 889 9862/9993	reception@lmm-med.co.za	rcelor Mittal Foundation Office Park Cnr McColm &, Delfos Blvd, Vanderbijlpark, 1911	
Greif	-	-	016 889 7407	sandy.pillay@greif.com	-	
KGB	-	-		info@kgb.co.za	PO Box 1001, Vanderbijlpark, 1911	
Reitumetse early learning centre	-	-	072 189 9024	rnaidoo@cer.org.za nloser@cer.org.za	-	
Connies Lodge and Conference Centre	-	-	082 701 4549	connie@connieshouse.co.za	-	
Tjokkerland	-	-	-	admin@tjokkers.co.za	-	
Tjokkerland	Maritza	-	-	admin@tjokkers.co.za	-	
Pakwe	Pieter Van Der Westhuizen		064 243 5425	pieter@pakwe.co.za	5 Leyland Street, Vanderbijlpark, 1911	
Pakwe	Louw	-	-	louw@pakwe.co.za	5 Leland Street, Vanderbijlpark, 1911	
Envirocycle			071 677 2077	manager.vdb@envirocycle.global		

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
Maltitech	-	-	016 986 1989	info@malitech.co.za	13 Leyland Street, Vanderbijlpark, 1911	
Thursoct	-	-	016 986 1180	info@thursoct.co.za	Thursoct PTY LTD 3 Leyland Street, Vanderbijlpark, 1911	
Private Resident	Patra Sindane	-	-	sindane@gmail.com	-	
Private Resident	Ojolao	-	-	ojolao@gmail.com	-	
Private Resident	Phineas	-	-	malapela.phineas@gmail.com	-	
Private Resident	Minah	-	-	Minkieminah@yahoo.com	-	
Private Resident	Zodwa	-	-	zodwam23@gmail.com	-	
Private Resident	Blakdove	-	-	blakdove@gmail.com	-	
Private Resident	Rinda van de Merwe	-	-	rinda.v.d.merwe@gmail.com	-	
Private Resident	SN Tshabalala	-	-	siyabonga2253@gmail.com	-	
Private Resident	Motsamai	-	-	lebakaemotsamai1@gmail.com	-	
Private Resident	Angeline Mundungu	-	-	amundungu@gmail.com	-	
Private Resident	Patra Sindane	-	-	sindane@gmail.com	-	
Private Resident	Fantisi Moleleki	-	-	fantisimoleleki@yahoo.com	-	
Private Resident	Rasstjl	-	-	rasstjl@yahoo.com	-	
Private Resident	Ojolao	-	-	ojolao@gmail.com	-	
Private Resident	Phineas	-	-	malapela.phineas@gmail.com	-	
Private Resident	Minah	-	-	Minkieminah@yahoo.com	-	
Private Resident	Zodwa	-	-	zodwam23@gmail.com	-	
Private Resident	Blakdove	-	-	blakdove@gmail.com	-	
Private Resident	Rinda van der Merwe	-	-	rinda.v.d.merwe@gmail.com	-	
Private Resident	Nicoline	-	-	Nicolinesmit19870309@gmail.com	-	
Private Resident	Siphiwe Patsu	-	-	siphiwepatsu@gmail.com	-	
PARASTATALS						
Eskom		-	-	Gauteng@eskom.co.za		
Eskom	Mr Neo Masemola	-	011 711 2824	neo.masemola@eskom.co.za		
Transnet	Mr Keith Sibisi	-	071 863 2535	keith.sibisi@transnet.net	-	
Transnet	Mr Thandekile Mfeka	-	083 286 0838	thandekile.mfeka@Transnet.net	-	
NGO'S						
Groundworks	Musa	Environmental NGO	082 589 7928	musa@groundwork.org.za	-	
Centre for Environmental Rights	Brendan Abdinor	Attorney and Environmental Activist	021 447 1647	Babdinor@cer.org.za	1 st Floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray, Cape Town	
Centre for Environmental Rights	Nicole Löser	Attorney and Environmental Activist	021 447 1647	nloser@cer.org.za	1 st Floor, Birkdale 2, River Park, 1 River Lane,	

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
					Liesbeek Parkway, Mowbray, Cape Town	
Centre for Environmental Rights	Michelle Koyama	Attorney and Environmental Activist	021 447 1647	mkoyama@cer.org.za	1 st Floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray, Cape Town	
Southern African Faith Communities Environment Institute	Stefan Cramer	Environmental Activist	021 701 8145	stefancramer@gmail.com	Green Building, 9b Bell Crescent, Westlake, 7945	
VEJA Environmental	Skhumbuzo Tyani	Environmental Activist	084 291 8510	Skhumbuzot@veja.org.za	Room 208, 2 nd Floor 64 President Kruger St Vanderbijlpark, 1910	
VEJA Environmental	Jacob Sebidi	Environmental Activist	-	Jacobsebidi.jnp@gmail.com	Room 208, 2 nd Floor 64 President Kruger St Vanderbijlpark	
VEJA Environmental	Mduduzi Tshabalala	Environmental Activist	-	mduduzit@veja.org	Room 208, 2 nd Floor 64 President Kruger St Vanderbijlpark	
VEJA Environmental	Bongani Mute	Environmental Activist	-	Bonganmute2@gmail.com	Room 208, 2 nd Floor 64 President Kruger St Vanderbijlpark	
LACROPA NPO	Thabo Letsela	Local NPO	-	loxionafrika@gmail.com	-	
LACROPA	Saroe Sererpane	Local NPO	-	jsenoroeme@gmail.com	-	
Mount Ridge Nature Conservancy	Eugene Ferreira	Chairperson	082 7825 736	mountridge@telkomsa.net	PO Box 2269 Vereeniging 1930	
Mount Ridge Nature Conservancy	Koos Nel	Member	083 2510 757	koos@toplay.co.za	PO Box 2269 Vereeniging 1930	
Mount Ridge Nature Conservancy	Piet Lottering	Member	082 3202 323	arconest@mweb.co.za	PO Box 2269 Vereeniging 1930	
Mount Ridge Nature Conservancy	Paul Ernst	Member	084 5000 155	paule@emfuleni.gov.za	PO Box 2269 Vereeniging 1930	
Mount Ridge Nature Conservancy	Johan Miller	Member	083 2631 599	johan@hei-jo.co.za	PO Box 2269 Vereeniging 1930	

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
Mount Ridge Nature Conservancy	Francois vd Bank	Member	083 4506 812	francois.vanderbank@arcelormittal.com	PO Box 2269 Vereeniging 1930	

Annexure D-1.2 Registered IAP Register (Withdrawn S12A Application IAP registered databae)

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
DEPARTMENTS AND LOCAL AUTHORITIES						
Department of Forests, Fisheries & Environment (DFFE)	Dr Patience Gwaze	Director: Air Quality Management	012 399 9192	pgwaze@dffe.gov.za	Private Bag X447, Pretoria, 0001	✓
Department of Forests, Fisheries & Environment (DFFE)	Ms Lydia Alade	Director: Air Quality Management	012 399 9192	LAlade@dffe.gov.za	Private Bag X447, Pretoria, 0001	✓
Department of Forests, Fisheries & Environment (DFFE)	Mr Derrick Makhubele	Director: Air Quality Management	012 399 9192	DMAKHUBELE@dffe.gov.za	Private Bag X447, Pretoria, 0001	✓
Gauteng Department of agriculture Land Reform & Rural Development (GDRD)	Ms Lydia Muditambi	Director: Air Quality Management	011 240 3193	lydia.muditambi@gauteng.gov.za	56 Eloff Street, Umnotho House, JOHANNESBURG	✓
Sedibeng District Municipality	Michael Nemangaya	District Air Quality Officer	016 450 3233	michaeln@sedibeng.gov.za	PO Box 471 Vereeniging, 1930	✓
Sedibeng District Municipality	Ndivhudzanyi Nesane	AEL Coordinator and Permitting	083 649 2400	Ndivhudzanyin@sedibeng.gov.za	PO Box 471 Vereeniging, 1930	✓
SURROUNDING LANDOWNERS / COMMUNITY MEMBERS AND RESIDENTS						
Cape Gate (Pty) Ltd	Mannei Mamba	Environmental Officer	016 980 2467	Mannei.Mamba@capegate.co.za	Nobel Boulevard NE3 Vanderbijlpark	✓
Cape Gate (Pty) Ltd	Riaan Sonntag	Divisional Executive - Davsteel	016 980 2449	Riaan.Sonntag@capegate.co.za	Nobel Boulevard NE3 Vanderbijlpark	✓
Air Products	Edgar Webb	UHS Field Manager	016 986 8678	Edgar.Webb@APSAP.co.za	Private Bag 784090 Sandton 2146	✓
Air Products	Emmanuel Khanyile	SHEQ Manager	016 986 8678	emmanuel.khanyile@airproducts.co.za	Private Bag 784090 Sandton 2146	✓
Consolidated Wire Industries (CWI)	SHEQ Team	SHEQ Team	016 980 3142	tshidi@cw-wire.co.za / cwi@sheqmanagement.co.za / Shegsupport@cw-wire.co.za	6 Telford St, N. E. 3, Vanderbijlpark, 1911	✓
Private Resident	Ms C Harries	Private Person	083 207 4626	-	-	✓

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
Private Resident	Ms CS de Klerk	Private Person	082 626 6990	deklerkr@telkomsa.net	-	✓
Private Resident	Stephan de Jager	Private Person	065 992 3680		-	✓
Private Resident	L Lewis	Private Person	-		-	✓
Private Resident	Michael Mokoena	Private Person	079 810 5364		-	✓
Private Resident	Thomas du Toit	Private Person	076 653 6137	thomasdutoit43@gmail.com	-	✓
PARASTATALS						
None						
NGO'S						
Centre for Environmental Rights	Michelle Koyama	Attorney and Environmental Activist	021 447 1647	mkoyama@cer.org.za	1 River Lane, Liesbeek Parkway, Mowbray, Cape Town	✓
Centre for Environmental Rights	Ms M Sithole	Attorney and Environmental Activist	021 447 1647	msithole@cer.org.za	1 st Floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray, Cape Town	✓
Centre for Environmental Rights	Ms M Sithole	Attorney and Environmental Activist	021 447 1647	msithole@cer.org.za	1 st Floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray, Cape Town	✓

Annexure D-1 Registered IAP

COMPANY / INSTITUTION	CONTACT PERSON	DESIGNATION	TEL	EMAIL	PHYSICAL / POSTAL ADDRESS	REGISTERED IAP
DEPARTMENTS AND LOCAL AUTHORITIES						
Department of Forests, Fisheries & Environment (DFFE)	Dr Patience Gwaze	Director: Air Quality Management	012 399 9192	pgwaze@dffe.gov.za	Private Bag X447, Pretoria, 0001	✓
Department of Forests, Fisheries & Environment (DFFE)	Ms Lydia Alade	Director: Air Quality Management	012 399 9192	LAlade@dffe.gov.za	Private Bag X447, Pretoria, 0001	✓
Department of Forests, Fisheries & Environment (DFFE)	Mr Derrick Makhubele	Director: Air Quality Management	012 399 9192	DMAKHUBELE@dffe.gov.za	Private Bag X447, Pretoria, 0001	✓
Gauteng Department of agriculture Land Reform & Rural Development (GDRD)	Ms Lydia Muditambi	Director: Air Quality Management	011 240 3193	lydia.muditambi@gauteng.gov.za	56 Eloff Street, Umnotho House, JOHANNESBURG	✓
Sedibeng District Municipality	Michael Nemangaya	District Air Quality Officer	016 450 3233	michaeln@sedibeng.gov.za	PO Box 471 Vereeniging, 1930	✓
Sedibeng District Municipality	Ndivhudzanyi Nesane	AEL Coordinator and Permitting	083 649 2400	Ndivhudzanyin@sedibeng.gov.za	PO Box 471 Vereeniging, 1930	✓
SURROUNDING LANDOWNERS / COMMUNITY MEMBERS AND RESIDENTS						
PARASTATALS						
None						
NGO'S						
GroundWork	Yegeshni			yegeshni@groundwork.org.za		✓
Centre for Environmental Rights NPC	Michelle Sithole			msithole@cer.org.za		✓
Centre for Environmental Rights NPC	Thandeka Kathi			tkathi@cer.org.za		✓
Centre for Environmental Rights NPC	Mosangoaneng Leteane			mleteane@cer.org.za		✓

Annexure D2

Copy of Written Notice, BID and Commenting Sheet

**APPLICATION FOR ALTERNATIVE EMISSION STANDARDS IN TERMS OF REGULATION 12A OF
GOVERNMENT NOTICE 893 PROMULGATED IN TERMS OF THE NATIONAL ENVIRONMENTAL
MANAGEMENT: AIR QUALITY ACT (NO 39 OF 2004)**

ARCELORMITTAL SOUTH AFRICA, VANDERBIJLPARK WORKS

Background Information Document

Purpose of the document

This Background Information Document (BID) provides a summary of information about the proposed activities and elaborates on the details of the legal processes that will be followed in order to apply for the Alternative Emission Standards in terms of GN 893, promulgated in terms of the National Environmental Management: Air Quality Act (Act No 39 of 2004).

The BID is intended as a public document, available to stakeholders who have or may wish to register as an Interested and/or Affected Party (I&AP) in order to partake in the S12A application process for the proposed alternative emission standards.

Project Information

ArcelorMittal South Africa SOC Ltd ("AMSA") operates the Vanderbijlpark Works, an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area in Gauteng. The facility remains strategically important to the South African steel industry and broader manufacturing value chain, supplying critical flat steel products to sectors including automotive manufacturing, construction, infrastructure development, mining, engineering, and downstream fabrication industries.

In recent years, AMSA has experienced severe and sustained financial pressure arising from a combination of adverse market and operational conditions, including declining domestic steel demand, increased competition from low-cost imports, escalating electricity and logistics costs, infrastructure constraints, and broader economic instability within the South African industrial sector. These pressures have materially affected the long-term financial sustainability of operations across the Group and have already resulted in the restructuring and closure of certain business units and operations within South Africa.

Against this background, AMSA has undertaken extensive assessments of the technical and economic feasibility of achieving compliance with certain

Minimum Emission Standards ("MES") applicable to the Direct Reduction ("DR") Kilns at the Vanderbijlpark Works. These assessments have demonstrated that the implementation of the level of additional abatement infrastructure required to consistently achieve the applicable Minimum Emission standards (MES) for new plants, would require substantial capital expenditure and operational costs that are not financially sustainable under the current operational and economic circumstances of the facility. The technical feasibility of the available solutions has not been proven and requires significant investment in Research and Development.

The DR Kilns form an integral component of the steel manufacturing process at Vanderbijlpark Works and remain critical to the continued operation and viability of the facility. The immediate implementation of technically complex emission reduction measures to achieve the new plant standards in terms of SO₂, would place significant additional financial strain on operations that are already under considerable economic pressure, potentially threatening the continued operation of the facility and associated employment opportunities.

Accordingly, and in terms of Section 12A of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), read together with the applicable provisions of Government Notice 893, as amended, AMSA hereby applies for alternative emission limits for the SO₂ emissions at the DR Kilns at the Vanderbijlpark Works. The application is based on a detailed assessment of technical feasibility, economic sustainability, existing operational constraints, current ambient air quality considerations, and the principles of the Best Practicable Environmental Option ("BPEO") as recognised within the National Framework for Air Quality Management in the Republic of South Africa (2017).

**APPLICATION FOR ALTERNATIVE EMISSION STANDARDS IN TERMS OF REGULATION 12A OF
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ARCELORMITTAL SOUTH AFRICA, VANDERBIJLPARK WORKS

Background Information Document

The ArcelorMittal Vanderbijlpark Works was issued an Atmospheric Emissions License (AEL) (AEL 0003/SDM/2012) by the Sedibeng District Municipality on the 29th September 2023 after a renewal and amendment process was completed. The following Listed Activities published in GN 893 (as amended) in terms of Section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) are therefore authorised in terms of the AEL (0003/SDM/2012), expiring on the 30th September 2028.

The operations at ArcelorMittal Vanderbijlpark Works were operational prior to 1 April 2010 and is therefore regarded as “existing plant” in terms of GN 893 which contains the Minimum Emissions Standards (MES) in terms of NEM:AQA. Existing plants were required to comply with the MES for new plants by 1 April 2020 unless otherwise specified or subject to a postponement. ArcelorMittal was granted such a once off postponement approval with the alternative emission standards set out for SO₂ emissions at the DR Kilns. These limits are applicable for the interim period until the 31st of March 2025 for the following:

- **Kiln 3** – Alternative SO₂ standard of 800 mg/Nm³ was granted until 2025
- **Kiln 4** – Alternative SO₂ standard of 500 mg/Nm³ was granted until 2025
- **Kiln 5** – Alternative SO₂ standard of 700 mg/Nm³ was granted until 2025
- **Kiln 6** – Alternative SO₂ standard of 750 mg/Nm³ was granted until 2025

The Kiln 1 and 2 has not been operational for the last 5 years.

Stack emissions monitoring results between 2020 to 2025 indicate that all PM and NO_x emissions at the Direct Reduction Kilns (DR Kilns) are compliant with the MES for new plants, however SO₂ emission levels, have not yet been able to achieve the MES for new plants nor the alternative limit as approved in terms of the postponement granted.

A previous Section 12A application for alternative emission limits was submitted by ArcelorMittal South Africa during 2025 based on the operational strategy and future plant configuration applicable at that time, including the proposed Electric Arc Furnace (“EAF”) route, new coke batteries, and a coke oven gas cleaning and desulphurisation plant.

Subsequent material changes to the operational and financial position of the ArcelorMittal South Africa group, including the cancellation of the proposed EAF project, the shutdown of several coke batteries, and the abandonment of the proposed future gas cleaning and coke battery expansion projects, resulted in significant changes to the future operational strategy and emissions profile of the Vanderbijlpark Works.

Accordingly, the previous application was withdrawn and amended to ensure that the current Section 12A application accurately reflects the revised operational configuration, current financial constraints, updated emissions scenarios, and realistically achievable emission reduction measures applicable to the Vanderbijlpark Works.

➤ **Required Environmental Authorisation**

Paragraph 12(A) of GN 893 as amended states that.

- a. “an existing plant may submit an application regarding a new plant standard to the National Air Quality Officer for consideration if the plant is in compliance with other emission standards but cannot comply with a particular pollutant or pollutants.
- b. An application must demonstrate a previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.
- c. The National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if:

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- i. there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or*
- ii. the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard*

ArcelorMittal is therefore applying for an alternative emission standard for the Kilns in terms of the SO₂ concentration at **1 500 mg/Nm³**. The facility proposes to only operate 3 of the 6 kilns in future.

➤ **Outcome of the Atmospheric Impact Report**

The Atmospheric Impact Report ("AIR") assessed the potential ambient air quality impacts associated with the Vanderbijlpark Works under various historical, current, and future operational scenarios, including the **proposed alternative SO₂ emission limit of 1 500 mg/Nm³** for the Direct Reduction ("DR") Kilns.

The assessment demonstrated that meaningful reductions in overall works-wide SO₂ emissions can still be achieved under the revised future operational scenarios despite the continued operation of the DR kilns under the proposed alternative emission limit. Under the future operational scenario applying the proposed alternative emission limit of 1 500 mg/Nm³ with one coke battery remaining operational, the total works-wide SO₂ emissions are predicted to reduce by approximately 6% relative to the historical 2018 baseline scenario and approximately 9% relative to the current operational configuration. Under the future scenario where no coke batteries remain operational, the assessment predicts an overall SO₂ reduction of approximately 15% relative to the baseline scenario and approximately 17% relative to the current operational configuration.

The AIR included detailed atmospheric dispersion modelling for SO₂, NO₂, PM₁₀ and PM_{2.5} and assessed the predicted impacts at identified sensitive receptor locations, including surrounding residential

areas, schools, healthcare facilities, and other sensitive community receptors.

The modelling assessment concluded that the predicted ambient SO₂ concentrations associated with all assessed operational scenarios remain below the applicable National Ambient Air Quality Standards ("NAAQS") at the identified sensitive receptors within the study area. The AIR further concluded that the proposed alternative emission limit would not result in unacceptable ambient air quality impacts or a material increase in ambient SO₂-related health risk at the assessed receptor locations.

The AIR additionally confirmed that particulate matter (PM₁₀ and PM_{2.5}) remains one of the primary pollutants of concern within the Vaal Triangle Airshed Priority Area and that ambient air quality within the area is influenced by multiple regional emission sources within the broader airshed.

Based on the modelling assessment and scenario evaluation undertaken, the AIR supports the requirements of Regulation 12A of Government Notice 893 (as amended) by demonstrating that the proposed alternative SO₂ emission limit would remain acceptable from an ambient air quality perspective and would not result in a material increase in health risk at the assessed sensitive receptor locations.

➤ **Outcome of the Health Risk Assessment Report**

A Community Health Risk Assessment ("HHRA") was undertaken by INFOTOX (Pty) Ltd in support of the Section 12A application for the proposed alternative SO₂ emission limit applicable to the Direct Reduction ("DR") Kilns at the Vanderbijlpark Works.

The HHRA was undertaken in conjunction with the Atmospheric Impact Report ("AIR") and specifically assessed the potential health implications associated with exposure to ambient SO₂ concentrations at surrounding sensitive receptor locations, including residential areas, schools, healthcare facilities, and

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other vulnerable community receptors within the study area.

The assessment utilised internationally recognised epidemiological risk assessment methodologies and evaluated potential health outcomes associated with ambient SO₂ exposure, including:

- asthma exacerbation resulting in hospital admissions or emergency room visits; and
- natural mortality associated with short-term SO₂ exposure.

The HHRA concluded that:

- the calculated attributable fractions associated with asthma exacerbation and natural mortality at all assessed receptor locations were insignificantly low;
- the associated health risks under all assessed operational scenarios, including the proposed alternative emission limit scenario of 1 500 mg/Nm³, remain insignificantly different from current or background health risks; and
- implementation of the proposed alternative SO₂ emission limit would not result in a material increase in community health risk at the assessed receptor locations.

The HHRA further evaluated ambient SO₂ monitoring data recorded within the study area between 2021 and 2025 and confirmed that the measured ambient SO₂ concentrations remained below the applicable National Ambient Air Quality Standards ("NAAQS") during the monitoring period.

The assessment also considered prevailing wind conditions and atmospheric dispersion patterns within the study area and concluded that the Vanderbijlpark Works makes an insignificant contribution to ambient SO₂ concentrations measured within the surrounding residential areas.

The HHRA additionally considered concerns relating to the potential conversion of SO₂ to sulphate

particulates and concluded that these effects are inherently incorporated into the epidemiological studies used to quantify SO₂-related health risks and would not materially alter the already low ambient particulate concentrations predicted within the Atmospheric Impact Report.

Overall, the HHRA concluded that the proposed alternative SO₂ emission limit of 1 500 mg/Nm³ for the DR kilns would not result in unacceptable community health impacts or material increases in ambient SO₂-related health risks at the surrounding sensitive receptor locations.

Historical Emissions Reductions

Historical emissions trend analysis for the Vanderbijlpark Works demonstrates that substantial reductions in overall SO₂ emissions have already been achieved over the past two decades through operational optimisation, infrastructure upgrades, plant rationalisation, and the shutdown of selected high-emitting operational units.

Overall SO₂ emissions associated with the Vanderbijlpark Works have reduced significantly since 2005 through measures including:

- the decommissioning and shutdown of several coke batteries;
- the shutdown of the Electric Arc Furnace ("EAF");
- implementation of emissions reduction and gas management projects;
- improvements to sinter plant baghouse performance;
- operational optimisation and reduced gas consumption;
- and broader operational restructuring initiatives across the Works.

Most recently, the shutdown of Coke Batteries 6, 7, 8 and 9 during 2024 and 2025 contributed significantly toward reducing the overall SO₂ emissions load associated with the Vanderbijlpark Works.

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The historical emissions trend demonstrates that ArcelorMittal South Africa has consistently implemented measures aimed at reducing the overall emissions footprint of the facility over an extended period of time, notwithstanding the continued technical and operational challenges associated with achieving the applicable new plant SO₂ emission standard at the Direct Reduction ("DR") Kilns.

The revised future operational scenarios assessed as part of the current application further demonstrate that meaningful reductions in overall works-wide SO₂ emissions are still predicted under the revised operational strategy currently being implemented at the Vanderbijlpark Works.

➤ **Conclusion**

An alternative SO₂ emission limit of **1 500 mg/Nm³** is requested for the continued operation of the Direct Reduction ("DR") Kilns at the ArcelorMittal South Africa Vanderbijlpark Works. In support of this application, the following key considerations are submitted:

- Emission monitoring results confirm that the DR kilns are compliant with the applicable new plant Minimum Emission Standards ("MES") for particulate matter ("PM") and oxides of nitrogen ("NO_x"). The primary non-compliance challenge associated with the DR kilns relates specifically to the applicable new plant SO₂ emission standard.
- Investigations undertaken by ArcelorMittal South Africa indicate that the implementation of dedicated sulphur removal or flue gas desulphurisation technology required to achieve the applicable new plant SO₂ emission standard at the DR kilns is currently not considered technically practicable or economically sustainable within the operational and financial context of the Vanderbijlpark Works. The exceptionally large flue gas volumes associated with the DR kiln process would require substantial capital-intensive

infrastructure and significant operational expenditure.

- The sulphur content associated with the coal utilised within the DR process forms an intrinsic part of the metallurgical reduction process and cannot readily be eliminated without materially affecting kiln performance, operational stability, and production efficiency. In addition, coal quality and sulphur content have deteriorated over time due to limitations in the availability of lower sulphur coal sources.
- The DR kilns remain strategically important to the operational stability and sustainability of the Vanderbijlpark Works due to their role within the integrated ironmaking process, including blast furnace operational support, reduced coke consumption, operational flexibility in ore utilisation, and steam and energy generation within the Works.
- The scenario assessment undertaken as part of this application demonstrates that meaningful reductions in overall works-wide SO₂ emissions can still be achieved through broader operational restructuring, plant rationalisation, reduced coke production capacity, and revised operational configurations across the Vanderbijlpark Works, even where the DR kilns operate under the proposed alternative emission limit.
- Under the revised future operational scenario applying the proposed alternative emission limit of **1 500 mg/Nm³** for the DR kilns, overall works-wide SO₂ emissions are predicted to reduce relative to both the historical baseline scenario and the current operational configuration.
- The Atmospheric Impact Report ("AIR") undertaken in support of the application indicates that the predicted ambient SO₂ concentrations associated with the assessed operational scenarios remain

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below the applicable National Ambient Air Quality Standards ("NAAQS") at the identified sensitive receptor locations assessed within the study area.

- The atmospheric dispersion modelling assessment further indicates that the proposed alternative emission limit scenario does not result in a material increase in ambient SO₂-related health risk at the assessed sensitive receptors.
- The Vanderbijlpark Works is located within the Vaal Triangle Airshed Priority Area, where particulate matter remains one of the primary pollutants of concern within the airshed. Available ambient monitoring information and the findings of the AIR indicate that ambient SO₂ concentrations within the area remain generally within the applicable ambient air quality standards.
- Significant socio-economic considerations are also associated with the continued operation of the Vanderbijlpark Works and the DR kilns, including employment

sustainability, downstream industrial supply chains, operational stability of the integrated steel manufacturing process, and broader economic implications associated with domestic steel production capacity within South Africa.

It is therefore submitted that the requested alternative SO₂ emission limit of **1 500 mg/Nm³** for the DR kilns represents a balanced, reasonable, and technically justified interim approach within the current operational, technical, and economic context applicable to the Vanderbijlpark Works, while still contributing toward broader works-wide emission reduction objectives and the overall air quality management objectives applicable within the Vaal Triangle Airshed Priority Area.

➤ **PUBLIC PARTICIPATION**

The application will be submitted to the National Air Quality Officer as required by regulation (12A) of the Notice.

ArcelorMittal has appointed Zantow Environmental Consulting Services to undertake a Public Participation Process (PPP) for the above-mentioned application. According to Section (2)(4)(f) and (o) of the National Environmental Management Act (Act 107 of 1998) – "NEMA" (as amended):

- the participation of all Interested and Affected Parties (I & APs) in environmental governance must be promoted and people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation.
- Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.
- the environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest, and the environment must be protected as the people's common heritage.

In order to give effect to the above-mentioned principles, it is essential to ensure that there is adequate and appropriate opportunity for public participation in decisions that may affect the environment. In this regard, Zantow Environmental Consulting Services considered the PPP guideline (as revised) as contemplated in Section 24J of the NEMA and NEMA: AQA to ensure a comprehensive and inclusive participation and commenting during the PPP for the above application.

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Background Information Document

Parties that wish to formally register their interest in application process and to obtain more information as the application process continues are requested to forward their contact details to the contact details listed below within 30 days of the notice to;

- Cell: 083 3843 641
- Email: Karien@zantow.co.za;
- PO Box: 3858, Vanderbijlpark, 1900

A copy of the Motivation Report and the AIR will be available from the following locations for a period of 30 days:

Website: www.zantow.co.za (for download)

E-mail: karien@zantow.co.za / info@zantow.co.za (Preferred)

Hard copy: ArcelorMittal Vanderbijlpark, Delfos Boulevard (security office at the access gate)
& Emfuleni Public Library

A public meeting is scheduled for the 27th May 2026 at Stonehaven on Vaal, Vanderbijlpark as follows;

- Session 1: 09:00 – 12:00
- Session 2: 17:00 to 19:00

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ARCELORMITTAL SOUTH AFRICA, VANDERBIJLPARK WORKS

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Parties who wish to be registered as an Interested and Affected Party (I&AP) in terms of this application are requested to please complete the form below and to return a copy to the appointed EAP (contact details below) within 30 days of this notice.

APPOINTED EAP - ZANTOW ENVIRONMENTAL CONSULTING SERVICES CC

Contact person:	Karien Zantow	Cell:	083 384 3641
Postal address:	PO Box 3858, Vanderbijlpark, 1900	Fax:	086 465 3219
Registration Nr	2008/205012/23	E-mail:	karien@zantow.co.za

**CONTACT DETAILS OF STAKEHOLDER TO BE REGISTERED AS AN INTERESTED AND AFFECTED
PARTY**

Name:	_____	Organisation	_____
Postal Address:	_____	Physical Address:	_____
	_____		_____
	_____		_____
Tel:	_____	Email:	_____

Please register me as an interested or affected party so I may receive further information and notifications during and after the application.

YES	NO
-----	----

Do you have any objection or concerns that needs to be addressed regarding the proposed application?

YES	NO
-----	----

I hereby provide approval /consent for my contact details and comments to be included in the Report.

YES	NO
-----	----

I would like to receive my notifications by:

FAX	POST	EMAIL
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Any comments / concerns that you would like to raise at this stage of the project?
(Please use additional pages, if required):

Dear Interested and Affected Party

15 May 2026

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa (“AMSA”) operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

The Vanderbijlpark Works was legally operational prior to 1 April 2010 and therefore constitutes an “existing plant” in terms of the Listed Activities and Associated Minimum Emission Standards (“MES”) published under Government Notice 893 (as amended) in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (“NEM:AQA”).

The facility currently operates under Atmospheric Emission Licence (“AEL”) Reference Number AEL0003/SDM/2012 issued by the Sedibeng District Municipality.

Emission monitoring results indicate that the Direct Reduction (“DR”) Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter (“PM”) and oxides of nitrogen (“NO_x”). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to DR Kilns 4, 5 and 6.

The application is supported by:

- a detailed Motivation Report;
- an Atmospheric Impact Report (“AIR”) compiled by Airshed Planning Professionals; and
- a Community Health Risk Assessment (“HHRA”) compiled by INFOTOX.

The specialist studies concluded that:

- the proposed alternative emission limit would not result in exceedances of the applicable National Ambient Air Quality Standards at the assessed sensitive receptors;
- overall works-wide SO₂ reductions are still achieved under the revised operational scenarios assessed;
- and the proposed alternative emission limit would not result in a material increase in community health risk at the surrounding receptor locations.

Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was previously submitted during 2025, but was subsequently withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works.

Since withdrawal of the previous application, significant operational and strategic changes have occurred at the facility, including:

- cancellation of the previously proposed Electric Arc Furnace (“EAF”) project;
- abandonment of the proposed future coke battery expansion programme;
- shutdown of Coke Batteries 6, 7, 8 and 9;
- revised operational restructuring measures; and

- revised future operational and emissions reduction strategies.

The revised application therefore includes updated operational assumptions, revised emissions inventories, updated atmospheric modelling, revised health risk assessments, updated socio-economic considerations, and revised operational motivations reflecting the current operational configuration of the Vanderbijlpark Works.

A Background Information Document ("BID") is available, should you require a summary of the reports and information. Interested and affected parties are invited to:

- register as stakeholders;
- review the available reports;
- submit written comments, concerns, objections, or requests for additional information; and
- participate in the public participation process.

Stakeholders who submitted comments during the previous Section 12A application process may also indicate whether they wish for their previous comments, objections, submissions, and representations to be carried forward and considered as part of this revised application process. All comments received during the public participation process will be considered and responded to within the final application report submitted to the Competent Authority.

To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below, within 30 days of this notice.

Zantow Environmental Consulting Services CC:

Karien Zantow
Cell: 083 393 3897
Email: info@zantow.co.za / karien@zantow.co.za;
PO Box: 3858, Vanderbijlpark, 1900

Please note that the S12A application will be available for review from the **15th May 2026** to the **15th June 2026** at the following locations:

Website: www.zantow.co.za (downloads)

E-mail: info@zantow.co.za / karien@zantow.co.za / (on request)

Hard copy: ArcelorMittal Vanderbijlpark, Delfos Boulevard (security office at the access gate)

& Emfuleni Public Library

A public meeting is scheduled for **the 27th May 2026** at **Stonehaven on Vaal**, Vanderbijlpark. Please contact Zantow Environmental Consulting Services should you require further information regarding the venue, format, or attendance arrangements.

Yours Sincerely



Karien Zantow
Environmental Assessment Practitioner
Zantow Environmental Consulting Services
SACNASP Reg Nr: 400114/14
EAPASA Reg Nr 2019/1871

**APPLICATION FOR ALTERNATIVE EMISSION STANDARDS IN TERMS OF REGULATION 12A OF
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ARCELORMITTAL SOUTH AFRICA, VANDERBIJLPARK WORKS

APPOINTED EAP - ZANTOW ENVIRONMENTAL CONSULTING SERVICES CC

Contact person:	Karien Zantow	Cell:	083 384 3641
Postal address:	PO Box 3858, Vanderbijlpark, 1900	Fax:	086 465 3219
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**CONTACT DETAILS OF STAKEHOLDER TO BE REGISTERED AS AN INTERESTED AND AFFECTED
PARTY**

Name:	_____	Organisation	_____
Postal Address:	_____ _____ _____	Physical Address:	_____ _____ _____
Tel:	_____ _____	Email:	_____

Please register me as an interested or affected party so I may receive further information and notifications during and after the application.

YES	NO
-----	----

Do you have any objection or concerns that needs to be addressed regarding the proposed application?

YES	NO
-----	----

I hereby provide approval for my contact details and comments to be included in the Report.

YES	NO
-----	----

I would like to receive my notifications by:

FAX	POST	EMAIL
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Any comments / concerns that you would like to raise at this stage of the project?
(Please use additional pages, if required):

ARCELORMITTAL SOUTH AFRICA, VANDERBIJLPARK WORKS

[illegible]

Annexure D3

Written Notice and BID Distribution

Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: 'mjkekane@dffe.gov.za'; 'pgwaze@dffe.gov.za'; 'tramaru@dffe.gov.za'; 'pgasela@dffe.gov.za'; 'jwiti@dffe.gov.za'; 'smangold@dffe.gov.za'; 'SXaba@dffe.gov.za'; Ricca Marowe; 'DMAKHUBELE@dffe.gov.za'
Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Delivery	Read
	'mjkekane@dffe.gov.za'		
	'pgwaze@dffe.gov.za'		
	'tramaru@dffe.gov.za'		
	'pgasela@dffe.gov.za'		
	'jwiti@dffe.gov.za'		
	'smangold@dffe.gov.za'		
	'SXaba@dffe.gov.za'		
	Ricca Marowe		
	'DMAKHUBELE@dffe.gov.za'		
	Karien Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/16 11:07

Dear Interested and Affected
Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

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The facility currently operates under Atmospheric Emission Licence (“AEL”) Reference Number AEL0003/SDM/2012 issued by the Sedibeng District Municipality.

Emission monitoring results indicate that the Direct Reduction (“DR”) Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter (“PM”) and oxides of nitrogen (“NO_x”). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to DR Kilns 4, 5 and 6.

The application is supported by:

- a detailed Motivation Report;
- an Atmospheric Impact Report (“AIR”) compiled by Airshed Planning Professionals; and
- a Community Health Risk Assessment (“HHRA”) compiled by INFOTOX.

The specialist studies concluded that:

- the proposed alternative emission limit would not result in exceedances of the applicable National Ambient Air Quality Standards at the assessed sensitive receptors;
- overall works-wide SO₂ reductions are still achieved under the revised operational scenarios assessed;
- and the proposed alternative emission limit would not result in a material increase in community health risk at the surrounding receptor locations.

Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was previously submitted during 2025, but was subsequently withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works.

Since withdrawal of the previous application, significant operational and strategic changes have occurred at the facility, including:

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- abandonment of the proposed future coke battery expansion programme;
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Kind Regards
Mbali



Mbali Zwane
Environmental Consultant
SACNASP Reg Nr 170448
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Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: MUDITAMBI, LYDIA (GDARD); 'MichaelN@sedibeng.gov.za'; NesaneN@sedibeng.gov.za; AseefA@emfuleni.gov.za; zamanim@emfuleni.gov.za; mthuras30@gmail.com; counciltalkconsultants@gmail.com
Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Read
	MUDITAMBI, LYDIA (GDARD)	
	'MichaelN@sedibeng.gov.za'	
	NesaneN@sedibeng.gov.za	
	AseefA@emfuleni.gov.za	
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	counciltalkconsultants@gmail.com	
	Karien Zantow	Read: 2026/05/16 11:06

Dear Interested and Affected
Party

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The application is supported by:

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- an Atmospheric Impact Report (“AIR”) compiled by Airshed Planning Professionals; and
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The specialist studies concluded that:

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Sent: Friday, 15 May 2026 08:01
To: musa@groundwork.org.za; info@cer.org.za; Babdinor@cer.org.za; Nicole Loser; stefancramer@gmail.com; Skhumbuzot@veja.org.za; Jacobsebidjnp@gmail.com; mduduzit@veja.org; Bonganimute2@gmail.com; msithole@cer.org.za
Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:

Recipient

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Bonganimute2@gmail.com
msithole@cer.org.za
Karien Zantow

Read: 2026/05/16 11:06

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From: Mbali Zwane
Sent: Friday, 15 May 2026 07:57
To: 'Gauteng@eskom.co.za'; 'neo.masemola@eskom.co.za'; 'keith.sibisi@transnet.net'; 'thandekile.mfeka@Transnet.net'
Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Delivery	Read
	'Gauteng@eskom.co.za'		
	'neo.masemola@eskom.co.za'		
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	'thandekile.mfeka@Transnet.net'		
	Karien Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/19 04:44

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Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 07:57
To: Alande Ndlela; Victor Lupuwana; Mannei Mamba; 'joe@ferrous.co.za'; 'Edgar.Webb@Airproducts.co.za'; 'Sue.Nicholls@airproducts.co.za'; Neels Venter; Bongs Malindi; 'tshidi@cw-wire.co.za'; Tshifhiwa Mundalamo
Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application

Tracking:

Recipient

Delivery

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Bongs Malindi

'tshidi@cw-wire.co.za'

Tshifhiwa Mundalamo

Karien Zantow

Delivered: 2026/05/15 07:57

Dear Interested and Affected
Party

**NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF
REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE
NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)**

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa (“AMSA”) operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

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The facility currently operates under Atmospheric Emission Licence (“AEL”) Reference Number AEL0003/SDM/2012 issued by the Sedibeng District Municipality.

Emission monitoring results indicate that the Direct Reduction (“DR”) Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter (“PM”) and oxides of nitrogen (“NO_x”). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to DR Kilns 4, 5 and 6.

The application is supported by:

- a detailed Motivation Report;
- an Atmospheric Impact Report (“AIR”) compiled by Airshed Planning Professionals; and
- a Community Health Risk Assessment (“HHRA”) compiled by INFOTOX.

The specialist studies concluded that:

- the proposed alternative emission limit would not result in exceedances of the applicable National Ambient Air Quality Standards at the assessed sensitive receptors;
- overall works-wide SO₂ reductions are still achieved under the revised operational scenarios assessed;
- and the proposed alternative emission limit would not result in a material increase in community health risk at the surrounding receptor locations.

Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was previously submitted during 2025, but was subsequently withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works.

Since withdrawal of the previous application, significant operational and strategic changes have occurred at the facility, including:

- cancellation of the previously proposed Electric Arc Furnace (“EAF”) project;
- abandonment of the proposed future coke battery expansion programme;
- shutdown of Coke Batteries 6, 7, 8 and 9;
- revised operational restructuring measures; and
- revised future operational and emissions reduction strategies.

The revised application therefore includes updated operational assumptions, revised emissions inventories, updated atmospheric modelling, revised health risk assessments, updated socio-economic considerations, and revised operational motivations reflecting the current operational configuration of the Vanderbijlpark Works.

A Background Information Document (“BID”) is available, should you require a summary of the reports and information. Interested and affected parties are invited to:

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- review the available reports;
- submit written comments, concerns, objections, or requests for additional information; and
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To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below, within 30 days of this notice.

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Karien Zantow
Cell: 083 393 3897
Email: info@zantow.co.za / karien@zantow.co.za
PO Box: 3858, Vanderbijlpark, 1900

Please note that the S12A application will be available for review from the **15th May 2026** to the **15th June 2026** at the following locations:

Website: www.zantow.co.za (downloads)

E-mail: info@zantow.co.za / karien@zantow.co.za / (on request)

Hard copy: ArcelorMittal Vanderbijlpark, Delfos Boulevard (security office at the access gate)
& Emfuleni Public Library

A public meeting is scheduled for **the 27th May 2026 at Stonehaven on Vaal, Vanderbijlpark**. Please contact Zantow Environmental Consulting Services should you require further information regarding the venue, format, or attendance arrangements.

Kind Regards

Mbali



Mbali Zwane
Environmental Consultant
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Sent: Friday, 15 May 2026 08:01
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Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

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Dear Interested and Affected
Party

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PO Box: 3858, Vanderbijlpark, 1900

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Kind Regards

Mbali



Mbali Zwane

Environmental Consultant

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Sent: Friday, 15 May 2026 08:01
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Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

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	Karien Zantow	Read: 2026/05/19 04:44

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Mbali



Mbali Zwane
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Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

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	Karien Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/19 04:44

Dear Interested and Affected
Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa (“AMSA”) operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

The Vanderbijlpark Works was legally operational prior to 1 April 2010 and therefore constitutes an “existing plant” in terms of the Listed Activities and Associated Minimum Emission Standards (“MES”) published under Government Notice 893 (as amended) in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (“NEM:AQA”).

The facility currently operates under Atmospheric Emission Licence (“AEL”) Reference Number AEL0003/SDM/2012 issued by the Sedibeng District Municipality.

Emission monitoring results indicate that the Direct Reduction (“DR”) Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter (“PM”) and oxides of nitrogen (“NO_x”). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to DR Kilns 4, 5 and 6.

The application is supported by:

- a detailed Motivation Report;
- an Atmospheric Impact Report (“AIR”) compiled by Airshed Planning Professionals; and
- a Community Health Risk Assessment (“HHRA”) compiled by INFOTOX.

The specialist studies concluded that:

- the proposed alternative emission limit would not result in exceedances of the applicable National Ambient Air Quality Standards at the assessed sensitive receptors;
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- and the proposed alternative emission limit would not result in a material increase in community health risk at the surrounding receptor locations.

Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was previously submitted during 2025, but was subsequently withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works.

Since withdrawal of the previous application, significant operational and strategic changes have occurred at the facility, including:

- cancellation of the previously proposed Electric Arc Furnace (“EAF”) project;
- abandonment of the proposed future coke battery expansion programme;
- shutdown of Coke Batteries 6, 7, 8 and 9;
- revised operational restructuring measures; and
- revised future operational and emissions reduction strategies.

The revised application therefore includes updated operational assumptions, revised emissions inventories, updated atmospheric modelling, revised health risk assessments, updated socio-economic considerations, and revised operational motivations reflecting the current operational configuration of the Vanderbijlpark Works.

A Background Information Document (“BID”) is available, should you require a summary of the reports and information. Interested and affected parties are invited to:

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Karien Zantow
Cell: 083 393 3897

Email: info@zantow.co.za / karien@zantow.co.za
PO Box: 3858, Vanderbijlpark, 1900

Please note that the S12A application will be available for review from the **15th May 2026** to the **15th June 2026** at the following locations:

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Hard copy: ArcelorMittal Vanderbijlpark, Delfos Boulevard (security office at the access gate)
& Emfuleni Public Library

A public meeting is scheduled for **the 27th May 2026 at Stonehaven on Vaal, Vanderbijlpark**. Please contact Zantow Environmental Consulting Services should you require further information regarding the venue, format, or attendance arrangements.

Kind Regards
Mbali



Mbali Zwane
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Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
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Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
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Sent: Friday, 15 May 2026 08:01
To: dawid@casenviro.co.za; peet@casenviro.co.za; sam@bumatech.co.za; elca@elca.co.za; joe@ferrous.co.za; sales@conveyorsplicing.co.za; willie@hydroc.co.za; belindam@sltrading.co.za; natalie@iscgroup.co.za; vaaltool@mweb.co.za
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Karien Zantow

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	Karien Zantow	Read: 2026/05/16 11:06

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- shutdown of Coke Batteries 6, 7, 8 and 9;
- revised operational restructuring measures; and
- revised future operational and emissions reduction strategies.

The revised application therefore includes updated operational assumptions, revised emissions inventories, updated atmospheric modelling, revised health risk assessments, updated socio-economic considerations, and revised operational motivations reflecting the current operational configuration of the Vanderbijlpark Works.

A Background Information Document ("BID") is available, should you require a summary of the reports and information. Interested and affected parties are invited to:

- register as stakeholders;
- review the available reports;
- submit written comments, concerns, objections, or requests for additional information; and
- participate in the public participation process.

Stakeholders who submitted comments during the previous Section 12A application process may also indicate whether they wish for their previous comments, objections, submissions, and representations to be carried forward and considered as part of this revised application process. All comments received during the public participation process will be considered and responded to within the final application report submitted to the Competent Authority.

To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below, within 30 days of this notice.

Zantow Environmental Consulting Services CC:
Karien Zantow
Cell: 083 393 3897
Email: info@zantow.co.za / karien@zantow.co.za
PO Box: 3858, Vanderbijlpark, 1900

Please note that the S12A application will be available for review from the **15th May 2026** to the **15th June 2026** at the following locations:

Website: www.zantow.co.za (downloads)

E-mail: info@zantow.co.za / karien@zantow.co.za / (on request)

Hard copy: ArcelorMittal Vanderbijlpark, Delfos Boulevard (security office at the access gate)
& Emfuleni Public Library

A public meeting is scheduled for **the 27th May 2026 at Stonehaven on Vaal, Vanderbijlpark**. Please contact Zantow Environmental Consulting Services should you require further information regarding the venue, format, or attendance arrangements.

Kind Regards

Mbali



Mbali Zwane

Environmental Consultant

SACNASP Reg Nr 170448

T: 081 375 4647

E: mbali@zantow.co.za

www.zantow.co.za

DISCLAIMER

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Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: Riaan.Sonntag@capegate.co.za; Edgar.Webb@APSAP.co.za; emmanuel.khanyile@airproducts.co.za; deklerkr@telkomsa.net; thomasdutoit43@gmail.com
Cc: Karien Zantow
Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application
Attachments: ArcelorMittal S12A Background Information Document_Final.pdf

Tracking:	Recipient	Read
	Riaan.Sonntag@capegate.co.za	
	Edgar.Webb@APSAP.co.za	
	emmanuel.khanyile@airproducts.co.za	
	deklerkr@telkomsa.net	
	thomasdutoit43@gmail.com	
	Karien Zantow	Read: 2026/05/16 11:06

Dear Interested and Affected Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa (“AMSA”) operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

The Vanderbijlpark Works was legally operational prior to 1 April 2010 and therefore constitutes an “existing plant” in terms of the Listed Activities and Associated Minimum Emission Standards (“MES”) published under Government Notice 893 (as amended) in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (“NEM:AQA”).

The facility currently operates under Atmospheric Emission Licence (“AEL”) Reference Number AEL0003/SDM/2012 issued by the Sedibeng District Municipality.

Emission monitoring results indicate that the Direct Reduction (“DR”) Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter (“PM”) and oxides of nitrogen (“NO_x”). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to DR Kilns 4, 5 and 6.

The application is supported by:

- a detailed Motivation Report;
- an Atmospheric Impact Report (“AIR”) compiled by Airshed Planning Professionals; and

- a Community Health Risk Assessment (“HHRA”) compiled by INFOTOX.

The specialist studies concluded that:

- the proposed alternative emission limit would not result in exceedances of the applicable National Ambient Air Quality Standards at the assessed sensitive receptors;
- overall works-wide SO₂ reductions are still achieved under the revised operational scenarios assessed;
- and the proposed alternative emission limit would not result in a material increase in community health risk at the surrounding receptor locations.

Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was previously submitted during 2025, but was subsequently withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works.

Since withdrawal of the previous application, significant operational and strategic changes have occurred at the facility, including:

- cancellation of the previously proposed Electric Arc Furnace (“EAF”) project;
- abandonment of the proposed future coke battery expansion programme;
- shutdown of Coke Batteries 6, 7, 8 and 9;
- revised operational restructuring measures; and
- revised future operational and emissions reduction strategies.

The revised application therefore includes updated operational assumptions, revised emissions inventories, updated atmospheric modelling, revised health risk assessments, updated socio-economic considerations, and revised operational motivations reflecting the current operational configuration of the Vanderbijlpark Works.

A Background Information Document (“BID”) is available, should you require a summary of the reports and information. Interested and affected parties are invited to:

- register as stakeholders;
- review the available reports;
- submit written comments, concerns, objections, or requests for additional information; and
- participate in the public participation process.

Stakeholders who submitted comments during the previous Section 12A application process may also indicate whether they wish for their previous comments, objections, submissions, and representations to be carried forward and considered as part of this revised application process. All comments received during the public participation process will be considered and responded to within the final application report submitted to the Competent Authority.

To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below, within 30 days of this notice.

Zantow Environmental Consulting Services CC:
Karien Zantow
Cell: 083 393 3897
Email: info@zantow.co.za / karien@zantow.co.za
PO Box: 3858, Vanderbijlpark, 1900

Please note that the S12A application will be available for review from the **15th May 2026** to the **15th June 2026** at the following locations:

Website: www.zantow.co.za (downloads)
E-mail: info@zantow.co.za / karien@zantow.co.za / (on request)
Hard copy: ArcelorMittal Vanderbijlpark, Delfos Boulevard (security office at the access gate)

A public meeting is scheduled for **the 27th May 2026 at Stonehaven on Vaal, Vanderbijlpark**. Please contact Zantow Environmental Consulting Services should you require further information regarding the venue, format, or attendance arrangements.

Kind Regards

Mbali



Mbali Zwane

Environmental Consultant

SACNASP Reg Nr 170448

T: 081 375 4647

E: mbali@zantow.co.za

www.zantow.co.za

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Hand Deliveries of BID and Notice to Local Residents







ACKNOWLEDGEMENT OF RECEIPT OF NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

Applicant: ArcelorMittal South Africa Limited, Vanderbijlpark Works

Date: 15 May 2026

Name & Surname	Organisation/Private Individual	E-mail address	Signature
Jacob Raphivi		vo 0715983207	
Sam RADEBE		radebesam377@gmail.com	
MANDA KUMALO	Individual	matkhutso12@gmail.com	
Lehlohonolo	Monaheng	LehlohonoloMonaheng@gmail	
King Mokoena	Individual	Jeffrey Black Stone	
Claudia MASHILOANE		N/A	
Suzan Seerane	Angels Paradise DCC	bafatile@gmail.com	

[illegible]

Annexure D4

Site Notice and Proof of Placement

NOTICE

Section (2)(4)(f) and (o) of the National Environmental Management Act provides for the notification and participation of any interested and affected parties. To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below within 30 days of this notice.

CONTACT

@ karien@zantow.co.za (Preferred)

083 384 3641 (WhatsApp)

P.O. Box 3858

Vanderbijlpark
1900

MOTIVATION APPLICATION AND ATMOSHERIC IMPACT REPORT AVAILABLE AT:

@ karien@zantow.co.za (on request)

www.zantow.co.za
(Downloads)

Emfuleni Public Library &
ArcelorMittal Vanderbijlpark,
Delfos Boulevard security office

Register as a stakeholder
and submit your comments
on the Draft Reports by the
16th June 2026 to the above
contact details

APPLICATION FOR ALTERNATIVE EMISSION STANDARDS IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 PROMULGATED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (NO 39 OF 2004)

DATE OF THIS NOTICE: 15 MAY 2026

Applicant: ArcelorMittal Vanderbijlpark Works

Project: Application for Alternative Emission Standards for the SO₂ concentration at the DR Kilns 1-6.

Location: Delfos Boulevard, NW 7, Vanderbijlpark, Gauteng Province

Notice is hereby given that ArcelorMittal Vanderbijlpark Works intends to apply for an alternative plant standard for the DR Kilns at the Vanderbijlpark operations.

AUTHORIZATIONS REQUIRED

Alternative Emission Standard

ArcelorMittal Vanderbijlpark Works was operational prior to 1 April 2010 and is therefore regarded as "existing plants" in terms of GN 983. The Minimum Emissions Standards (MES) in terms of NEM:AQA specifies that all existing plants must comply with the MES for new plants by 1 April 2020 unless otherwise specified or subject to a postponement.

Stack emissions monitoring results indicate that the Sulphur Dioxide (SO₂) emissions have been reduced but will not be fully compliant with the new plant MES of 500 mg/Nm³. ArcelorMittal is requesting an alternative emission standard of **1 500 mg/Nm³** for the DR Kilns.

NEMAQA S21 Category	Appliance	Minimum Emission Standards (mg/Nm ³)				Requested Alternative Emission Standard
		Pollutant	Alternative Limit 31 st March 25	New Plant 2020	Existing Plant MES	
Subcategory 4.12: Pre-reduction and Direct Reduction "Production of pre- reduced or metallised ore or pellets using gaseous or solid fuels"	Kiln 1	Sulphur Dioxide (SO ₂)	None (Not operational)	500	1 700	Plant Off
	Kiln 2	Sulphur Dioxide (SO ₂)	None (Not operational)	500	1 700	Plant Off
	Kiln 3	Sulphur Dioxide (SO ₂)	800	500	1 700	Plant Off
	Kiln 4	Sulphur Dioxide (SO ₂)	500	500	1 700	1 500 mg/Nm ³
	Kiln 5	Sulphur Dioxide (SO ₂)	700	500	1 700	1 500 mg/Nm ³
	Kiln 6	Sulphur Dioxide (SO ₂)	750	500	1 700	1 500 mg/Nm ³

An Atmospheric Impact Report has determined that, at the proposed alternative standard, no national ambient air quality standards will be exceeded at any receptor.

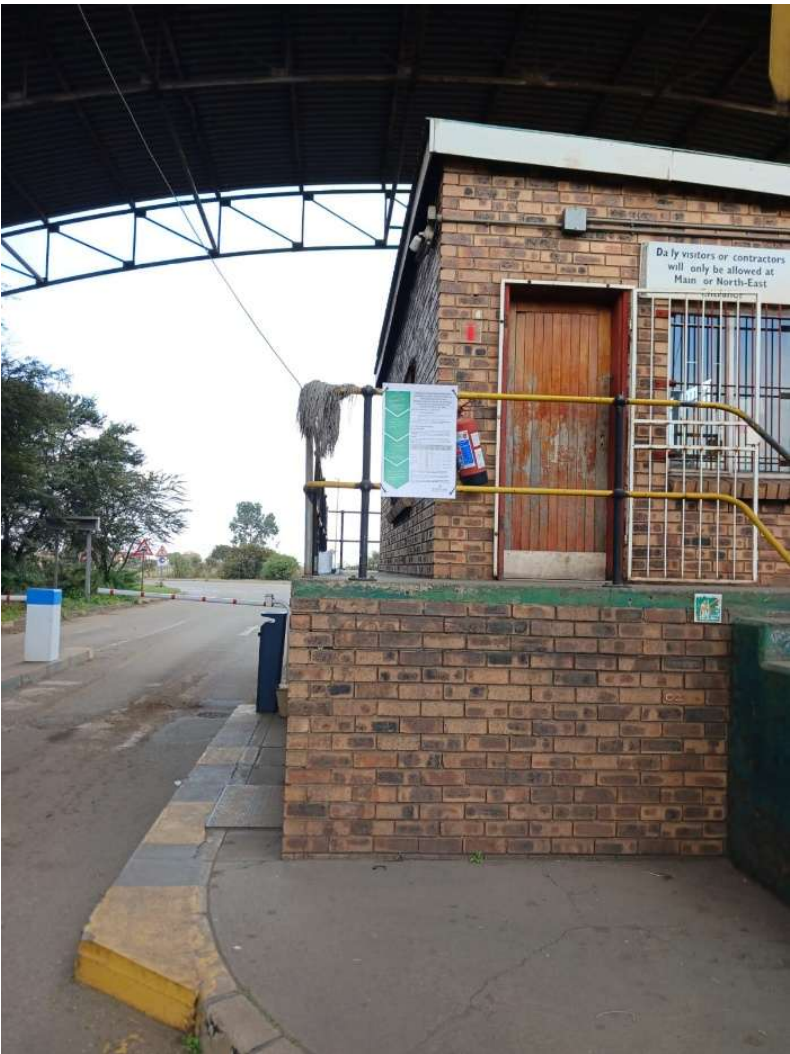
To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below within 30 days of this Notice.

A public meeting has also been scheduled for the **27th May 2026 to be held at Stonehaven on Vaal between 9:00-11:00 and 17:00-19:00**. All interested parties are welcome to attend.

Annexure D

Public Participation

Site Notices at ArcelorMittal Vanderbijlpark Gates



Annexure D5

Legal Notices (Newspapers)

Legals

Legals@citizen.co.za

SCHEME THE LIBERTY SITUATE AT JOHANNESBURG TOWNSHIP, LOCAL AUTHORITY CITY OF JOHANNESBURG which has been lost or destroyed. All interested persons having objection to the issue of such copy are hereby required to lodge the same in writing with the Registrar of Deeds at the South Gauteng Deeds Registry at Deeds Office Information Section, 28 Harrison St, Marshalltown, Johannesburg, 2107 within two weeks from the date of the publication of this notice. Dated at JOHANNESBURG this day of May 2026 LUIS ALEXANDRE DUARTE REBELO FOR SWITCHED-ON INVESTMENTS 79 PTY LTD duly authorised by resolution APPLICANTS: LUIS ALEXANDRE DUARTE REBELO FOR SWITCHED ON INVESTMENTS 79 PTY LTD, REGISTRATION NUMBER 2012/207105/07 Physical Address: 11 NEW MOUNTAIN ROAD, LINKSFIELD RIDGE 2198 E -mail address: luis@rb1prop.co.za Contact number: 082 770 5447

CK066106

MUNICIPAL NOTICE

77 TOWN PLANNING SCHEMES

Alphenpark Erf 13
CITY OF TSHWANE METROPOLITAN MUNICIPALITY NOTICE OF AN APPLICATION FOR THE REMOVAL OF RESTRICTIVE CONDITIONS IN THE TITLE DEED IN TERMS OF SECTION 16 (2) OF THE CITY OF TSHWANE LAND USE MANAGEMENT BY-LAW, 2016 (AMENDED 2024) We, Sonja Meissner-Roloff and Anecia Labuschagne of SMR Town & Environmental Planning, being the applicant of Erf 13, Alphenpark hereby give notice in terms of section 16(1)(f) of the City of Tshwane Land Use Management By-law, 2016 (Amended 2024) that I have applied to the City of Tshwane Metropolitan Municipality for the removal of certain conditions contained in the Title Deed in terms of section 16(2) of the City of Tshwane Land Use Management By-law, 2016 (Amended 2024) of the above-mentioned property. The property is situated at 18 Selati Street, Alphenpark. The application is for the removal of the following Conditions A (a) to (h), B (a) to (c) (i), (ii) and (iii) and B (e) and (l) in Deed of Transfer T8536/2016. The intention of the applicant in this matter is to establish an office building (the net floor area shall not exceed 350m) and two dwelling units on the property. The FAR for the office building will be 0.21 and the FAR for the two dwelling units will be 0.12. A separate application is submitted for the rezoning of the property from 'Residential 1' to 'Business 4'. Any objection(s) and/or comment(s), including the grounds for such objection(s) and/or comment(s) with full contact details and submitted in the prescribed form, without which the Municipality cannot correspond with the person or body submitting the objection(s) and/or comment(s), shall be lodged with, or made in writing to: The Group Head: Economic Development and Spatial Planning, PO Box 3242, Pretoria, 0001 or to CityP-Registration @tshwane.gov.za from 15 May 2026, until 12 June 2026. Full particulars and plans (if any) may be inspected during normal office hours at the Room E10, cnr Basden Avenue and Rabie Street, Die Hoewes Municipal offices as set out below, for the period indicated above. Should the Municipal Offices be closed or in the case of any other eventualities the land development application cannot be perused at the Offices of the Municipality, a copy can be requested from the applicant, at the following contact details: sonja@smrplan.co.za or anecia@smrplan.co.za. A copy of this notice and information as may be available, can be viewed at e-tshwane.co.za/eTshwane

/publications. For purposes of obtaining a copy of the application, it must be noted that the interested and affected party must provide the Municipality and the applicant with an e-mail address or other means by which to provide the said copy electronically. No part of the documents provided by the Municipality or the applicant, may be copied, reproduced or in any form published or used in a manner that will infringe on intellectual property rights of the applicant. Should any interested or affected party not take any steps to view and/or obtain a copy of the land development application, the failure by an interested and affected party to obtain a copy of an application shall not be regarded as grounds to prohibit the processing and consideration of the application. Please note the requirements for comments and objections contained in the City of Tshwane Land Use Management By-law, 2016 (Amended 2024) in terms of Schedule 25 and Form COT: F /31 for purposes of consideration thereof. The prescribed form to be completed by the objectors can be obtained from the applicant as well as from www.tshwane.gov.za. Address of Municipal Offices: Room E10, cnr Basden Avenue and Rabie Street, Die Hoewes Address of applicant E-mail address: sonja@smrplan.co.za; anecia@smrplan.co.za Physical address: 9 Charles de Gaulle Crescent, Highveld Office Park, Highveld Extension 12 Postal address: SMR Town & Environmental Planning, PO Box 7194, Centurion, 0046 Telephone No.: 012 665 2330 Dates on which notice will be published: 15 May 2026 and 22 May 2026 Closing date for any objections and/or comments: 12 June 2026 Reference: Item No. 51821

KP134223

78 AMENDMENT SCHEMES



Dunkeld West Erven 3 and 4
CITY OF JOHANNESBURG LAND USE SCHEME, 2018 Notice is hereby given in terms of Section 21 of the City of Johannesburg Municipal Planning By-Law, Amended, 2023, that we, the undersigned, intend to apply to the City of Johannesburg for an amendment to the land use scheme. Application typeTo rezone Erven 3 and 4 Dunkeld West from 'Residential 3', subject to conditions to 'Residential 1' including offices (excluding banks, building societies, medical and dental suites) in respect of Erf 3 Dunkeld West and 'Business 4' including offices, (excluding banks, building societies, medical suites and restaurants) in respect of Erf 4 Dunkeld West, subject to amended conditions. Application purposeThe purpose of the application will be to rezone (dezone) the property to reinstate the original rights. Site descriptionERVEN 3 AND 4 DUNKELD WEST Street address245 and 247 Jan Smuts Avenue, Dunkeld West, 2196 Particulars of the application will be open for inspection on the City's e-platform (www.joburg.org.za), or at the Newtown Junction Mall, (Old Nedbank Building), Upper Ground Floor, 100 Carr Street, Newtown and the Authorised Agent at the below mentioned address. An electronic copy of the application can also be requested from the Authorised Agent. Any objection or representation with regard to the application must be submitted to both the owner /agent and the Department of Development Planning at P O Box 30733, Braamfontein, 2017, or a facsimile sent to (011) 339 4000, or an email sent to ObjectionsPlanning@joburg.org.za by no later than 10 June 2026. Should you wish to object, kindly quote the Council Reference Number LUM5057/335 on all correspondence to the Council. AUTHORISED AGENT SJA Town and Regional Planners, 19 Orange Road, Orchards, 2192, Tel (011) 728-0042, Cell: 082 448 4346, Email: kevin@sja.co.za, Date of Advertisement: 13 May 2026,

Council Reference Number LUM5057/335. KP134011

Erf 1411 Secunda Township NOTICE OF APPLICATION IN TERMS THE RELEVANT SECTIONS CONTAINED IN CHAPTER 5 AND 6 OF THE GOVAN MBEKI SPATIAL PLANNING AND LAND USE MANAGEMENT BY-LAW, 2016.

I, Manganyi Owen of the firm Ripinda Development Planners, hereby give notice in terms of Section 89, read with Annexure A of the Govan Mbeki Spatial Planning and Land Use Management By-Law, 2016 that I have applied to the Govan Mbeki Local Municipality for the following application for: Amendment of Scheme number 86; File Plan Number: 16/2/3/8/6; Property Description: Erf 1411 Secunda Township Registration Division I.S., Province of Mpumalanga, Owner: Makwarela Hangwani Emmanuel and Vhutshilo. Notice is hereby given in terms of Section 89 read with Annexure A of the Govan Mbeki Spatial Planning and Land Use Management By-Law, 2016, that an application for the Amendment of the Govan Mbeki Land Use Scheme, 2020 has been lodged in respect of Erf 1411, Secunda, situated at No 5 Van Eck Street, within the municipal boundaries of the Govan Mbeki Local Municipality, from 'Residential 1' to 'Suburban Mixed Use' for a purpose of establishing of 'Offices'. Particulars of the application will lie for inspection during normal office hours at the office of the Manager: Town and Regional Planning, Room 323, 3rd Floor, South Wing, Municipal Buildings, for a period of 30 Days from 08 May 2026. Any person or persons having objections to, or representations in respect of, the application must lodge such objections or representations in writing to the Municipal Manager, at the address given above, within the period 30 Days from 08 May 2026 to 06 June 2026. Authorized Agent : Ripinda Development Planners Address:20 Douglas Street, Pretoriusrus, 2499; Contact Number: 073 980 4846;Email:rdvplanners@gmail.com

AC010265



Erf 450, Garfontein Township CITY OF TSHWANE METROPOLITAN MUNICIPALITY NOTICE OF A REZONING APPLICATION IN TERMS OF SECTION 16(1) OF THE CITY OF TSHWANE LAND USE MANAGEMENT BY-LAW, 2016 (AMENDED 2024)

We, Smit & Fisher Planning (Pty) Ltd, being the applicant of Erf 450, Garfontein Township hereby give notice in terms of Section 16(1)(f) of the City of Tshwane Land Use Management By-Law, 2016 (Amended 2024), that we have applied to the City of Tshwane Metropolitan Municipality for the amendment of the Tshwane Land Use Scheme, 2024, by the rezoning in terms of Section 16(1) of the City of Tshwane Land Use Management By-Law, 2016 (Amended 2024) of the property as described above. The property is situated at 693, Windsor Road, in Garfontein, Ward 44. The rezoning is from 'Residential 1' to 'Special' for Online Retail Office, Beauty Salon and Place of Refreshment, with a coverage of 32%, F.A.R. of 0.32 and a height of 10 metres. Any objection(s) and/or comment(s), including the grounds for such objection(s) and/or comment(s) with full contact details and submitted in the prescribed form, without which the Municipality cannot correspond with the person or body submitting the objection(s) and/or comment(s), shall be lodged with, or made in writing to: The Group Head, Economic Development and Spatial Planning, City of Tshwane Metropolitan Municipality, P O Box 3242, Pretoria, 0001 or to CityP-Registration @tshwane.gov.za from 15 May 2026 (the first date of the publication of the notice set out in section 16(1)(f) of the By-law referred to above), until 12 June 2026 (not less than 28 days after the date of first notice). Full particulars and

plans (if any) may be inspected during normal office hours at the Centurion Municipal offices as set out below, for the period indicated above. Should the Municipal Offices be closed or in the case of any other eventualities the land development application cannot be perused at the Offices of the Municipality, a copy of the application can be requested from the applicant, at the following contact details: admin@sfplan.co.za. A copy of this notice and information as may be available, can be viewed at the following admin@sfplan.co.za (Applicant's Municipality's Website), (if any). For purposes of obtaining a copy of the application, it must be noted that the interested and affected party must provide the Municipality and the Applicant with an e-mail address or other means by which to provide the said copy electronically. No part of the documents provided by the Municipality or the Applicant, may be copied, reproduced or in any form published or used in a manner that will infringe on intellectual property rights of the applicant. Should any interested or affected party not take any steps to view and/or obtain a copy of the land development application, the failure by an interested and affected party to obtain a copy of an application shall not be regarded as grounds to prohibit the processing and consideration of the application. Please note the requirements for comments and objections contained in the City of Tshwane Land Use Management By-Law, 2016 (Amended 2024) in terms of Schedule 25 and Form COT: F /31 for purposes of consideration thereof. The prescribed form to be completed by the objectors can be obtained from admin@sfplan.co.za as well as from BiancaJ@tshwane.gov.za and NonkululekoM@tshwane.gov.za. Address of relevant Municipal offices: City of Tshwane, Economic Development and Spatial Planning Department, Room E10, Centurion Municipal Offices, corner Basden and Rabie Streets, Centurion, 0157. Name and Address of applicant: Smit & Fisher Planning (Pty) Ltd Email address: admin@sfplan.co.za and noma@sfplan.co.za Physical address: 371 Melk Street, Nieuw Muckleneuk, 0181 Postal address: P. O. Box 908, Groenkloof, 0027 Website: www.sfplan.net Telephone No: (012) 346 2340 Fax No: (012) 346 0638 Dates on which notice will be published: 15 and 22 May 2026 Closing date for any objections and/or comments: 12 June 2026 Reference: Item no: 51690 Our ref: F4831



ERF 64 LYDIANA CITY OF TSHWANE METROPOLITAN MUNICIPALITY: NOTICE OF AN APPLICATION IN TERMS OF SECTION 16(2) OF THE CITY OF TSHWANE LAND USE MANAGEMENT BY-LAWS, 2016 (AMENDED 2024), FOR THE REMOVAL OF RESTRICTIVE TITLE DEED CONDITIONS ON TITLE DEED T40536/2024 IN TERMS OF ERF 64 LYDIANA, LOCATED AT NUMBER 44 ORPEN AVENUE: We, Bertus van Tonder Town Planning Consulting (Pty) Ltd, being the applicant of the Registered Owners of Erf 64 Lydiana, located at 44 Orpen Avenue, Lydiana, hereby give notice in terms of Section 16(1)(f) and as required in terms of Schedule 4 of The City of Tshwane Land Use Management By-Laws, 2016 (Amended 2024), that we have applied to the City of Tshwane Metropolitan Municipality in terms of Section 16(2) and as required in terms of Schedule 4 of the City of Tshwane Land Use Management By-Laws, 2016 (Amended 2024), for the removal of restrictive title deed conditions in respect of the above mentioned property namely conditions A. b), A. g), A. i), A. k), A. k) i), A. k) ii) and A. l) of Title Deed T40536 /2024. Any objection(s) and/or comment(s), including the grounds for such objection(s) and/or comment(s) with full contact details and submitted in the prescribed form, without which the Municipality cannot correspond with the person or body submitting the

objection(s) and/or comment(s), shall be lodged with, or made in writing to: The Strategic Executive Director: Economic Development and Spatial Planning, P.O. Box 3242, Pretoria, 0001 or to CityP-Registration @tshwane.gov.za from 15 May 2026 until 12 June 2026. Full particulars and plans (if any) may be inspected during normal office hours at the City of Tshwane's Municipal Offices' City Planning Department as set out below, for the period indicated above. Should the Municipal Offices be closed or in the case of any other eventualities the land development application cannot be perused at the Offices of the Municipality, a copy of the application can be requested from the applicant, at the following contact details: planner1@bvtplan.co.za. A copy of this notice and information as may be available, can be viewed at the following address: 373 Queen's Crescent, Lynnwood, Pretoria. For purposes of obtaining a copy of the application, it must be noted that the interested and affected party must provide the Municipality and the Applicant with an e-mail address or other means by which to provide the said copy electronically. No part of the documents provided by the Municipality or the Applicant, may be copied, reproduced or in any form published or used in a manner that will infringe on intellectual property rights of the applicant. Should any interested or affected party not take any steps to view and/or obtain a copy of the land development application, the failure by an interested and affected party to obtain a copy of an application shall not be regarded as grounds to prohibit the processing and consideration of the application. Please note the requirements for comments and objections contained in the City of Tshwane Land Use Management By-law, 2016 (Amended 2024) in terms of Schedule 25 and Form COT: F /31 for purposes of consideration thereof. The prescribed form to be completed by the objectors can be obtained from the applicant as well as from planner1@bvtplan.co.za and/or CityP-Registration @tshwane.gov.za and/or newlanduseapplications@tshwane.gov.za. Address of relevant Municipal Offices: City Planning Registration Offices, Room E10, cnr Basden Avenue and Rabie Street, Die Hoewes. Address of applicant: Physical address: 373, Queen's Crescent, Lynnwood, Pretoria. Postal address: P.O. Box 11771, Hatfield, 0028. E-mail address: planner1@bvtplan.co.za. Telephone No.: 012 342 7911. Dates on which notice will be published: 15 May 2026 and 22 May 2026. Closing date for any objections and/or comments: 12 June 2026. COT Reference: Item No. 51839. BVT Ref: 244 784.

AC010661

80 GENERAL

MAYFAIR 49 13th Ave

Notice The owner, Mahamed Mahamed Ahmed plans to demolish the existing structure at 49 13th Ave, Mayfair, Johannesburg. The Any interested or affected parties who wishes to comment on this, are invited to do so in writing to: The PROVINCIAL HERITAGE RESOURCE AUTHORITY Gauteng (PHRA-G): noluthando.cembi@gauteng.gov.za & tebogo.molokomme@gauteng.gov.za and amruta.vallabh@gmail.com Closing date for comments 15 June 2026. .

KP134303

SALE IN EXECUTION

82 EAST & WEST RAND SALE IN EXECUTION

NOABA GUARANTEE SPV (PTY) LTD ESKOM FINANCE COMPANY SOC LIMITED /NKABINDE JC & NZ
IN THE HIGH COURT OF

SOUTH AFRICA GAUTENG DIVISION, JOHANNESBURG Case number: 2024/048184 In the matter between:- NOABA GUARANTEE SPV (PTY) LTD 1st Applicant ESKOM FINANCE COMPANY SOC LTD 2nd Applicant and NKABINDE; JABULANE CHARLES 1st Respondent NKABINDE; NOSIPHO ZEPHORA 2nd Respondent NOTICE OF SALE IN EXECUTION (AUCTION) In execution of a judgment of the HIGH COURT SOUTH AFRICA, GAUTENG LOCAL DIVISION JOHANNESBURG, in the suit, a sale WITH A RESERVE PRICE OF R1 000 000.00 to the highest bidder, will be held by the SHERIFF SANDTON NORTH at 24 RHODES STREET, KENSINGTON 'B', RANDBURG on 2 JUNE 2026 at 11h00 of the under mentioned property of the defendants on the conditions which may be inspected at the offices of the sheriff, prior to the sale. CERTAIN: ERF 534 BARBEQUE DOWNS EXTENSION 38 TOWNSHIP; REGISTRATION DIVISION J.R., THE PROVINCE OF GAUTENG MEASURING 265 (TWO HUNDRED AND SIXTY FIVE) SQUARE METRES HELD BY DEED OF TRANSFER T 63867/2016 SITUATED AT: 31 MATEKULA COUNTRY ESTATE, 7 DICKENS ROAD, BARBEQUE DOWNS EXTENSION 38, MIDRAND ZONING: ZONED RESIDENTIAL MAGISTERIAL DISTRICT: SANDTON NORTH IMPROVEMENTS:The nature, extent, condition and existence of the improvements are not guaranteed and no warranty is given in respect thereof and are sold 'voetstoots'. MAIN BUILDING:3 BEDROOMS, 2 BATHROOMS, 1 SEPARATE TOILET, KITCHEN, LOUNGE, DININGROOM. OUTBUILDING:2 GARAGES 1.This sale is a sale in execution pursuant to a judgment obtained in the above court. 2. THE PURCHASER shall pay auctioneer's commission subject to a maximum of R40 000.00 plus VAT and a minimum of R3 000.00 plus VAT. 3.A Deposit of 10% of the purchase price immediately on demand by the Sheriff, the balance of purchase price and any such interest payable, shall be paid to the Sheriff against Transfer and shall be secured by a bank guarantee, to be approved by the plaintiff's attorney, which shall be furnished to the Sheriff within 21 days after the date of sale. 4.The rules of auction and a full advertisement is available 24 hours prior to the auction at the offices of the SHERIFF SANDTON NORTH at 24 RHODES STREET ,

KENSINGTON B, RANDBURG. The office of the Sheriff SANDTON NORTH will conduct the sale. Registration as a buyer is a pre-requisite subject to conditions, inter alia: (a)Directive of the Consumer Protection Act 68 of 2008 (http://www.info.gov.za/view/DownloadFileAction?id=99961) (b)FICA legislation Proof of Identity and address particulars (c)Payment of a registration fee of R50 000.00 in EFT or Bank Guarantee (d) Registration conditions Dated at Johannesburg on the 13 MARCH 2026. PME ATTORNEYS NORTHCLIFF Applicant's Attorneys C/o Olivier & Malan Attorneys Unit 4 Gardens Business Park Ateljee Road, Randpark Ridge Tel: 066 077 9702 REF: JAJ MOLLER / X453

KP133762

83 JOHANNESBURG SALE IN EXECUTION

MOHLALA D P / SEGAFSA I K & ROAD ACCIDENT FUND (Case NO: 3542/2020)

IN THE HIGH COURT OF SOUTH AFRICA LIMPOPO DIVISION, POLOKWANE In the matters between:- Case NO: 3542/2020 MOHLALA DIKETSO PRECIOUS PLAINTIFF RAF LINK NO: 4851347 AND IN RE: Case NO: 4858/2022 SEGAFSA S T O M I S A A C KOTSEPHASWA PLAINTIFF RAF LINK NO: 5069118 AND ROAD ACCIDENT FUND DEFENDANT NOTICE OF SALE: MOVABLE ASSETS IN PURSUANCE of JUDGEMENTS of the abovementioned Court and a Writ for Execution, the following property will be sold in execution on the 22 May 2026 at 10h00 at 2 Eco Glades Office Park, 420 Witch Hazel Avenue, Centurion, by the Sheriff of the High Court Centurion East to the highest bidder: 5 Hydrobiol 9Samsung Microwave 114 Dustbins 18Defy Bar Fridge 47Whiteboards 45 Office Table (with Pedestal drawer) 142HP Laptops 1 White Folding table 4Whiteboard on wheels 142HP Laptop 5Boardroom round table 2 Full Computer Set 20Samsung 55" Plasma TV 96Dell Monitor 10HP All-in-One Desktop 12 Sharp MX Printer 28Hisense Bar Fridge 338 Telephones 19Steel shelves 1Small Safe 63 Office Tables 12-Door defy silver fridge 1 Hydrobiol dispenser 28Rexel Shredder 17Sharp printers 1Security Scanner 30Steel tables 16 Office desks + Credenzas 1Small Table and Plastic Chair 2Phillips Monitor 5Lenovo laptops 1Small Bookshelf 1Blue Jack Trolley 1Samsung 32" Plasma TV 1Firearm box 4Wood tables 2 2-Door green filing cabinet 8OBC Ring binders 3 Whiteboards on stand 255 Inch Plasma TV 1 Whirlpool oven 1Table 33Logi Mouse Boxes 1 Various Computers 1Various computer boxes 1 Various Projectors 2Various laptops 1Various network boxes 1Various network cables 1Various monitors 1Various microphones 1Various printers 1Various projector screens 1Various video conference system 1Various Plasma TVs 1 Elegance Air Conditioner 1Office desk & 2 chairs 1 Round table & 3 chairs 1HP Laminator 2Large Stapler 4Large Punchers 3Bar fridges 1 Various computer screens and boxes 1Various network controllers 2LG Bar fridge 7White Filing Cabinets 2Round boardroom desks 2 Round glass coffee table 22Red Plastic Chairs 1 Executive desk (with pedestal) 1Wall side table Logicam system 1Creston Touchpad 8 Leather couches 13Boardroom tables 1Creston conference system 8Bar Chairs 2 Salton Warner 2Steel trolley servers 1 Samsung TV 45 Inch 5Whirlpool microwave 1 Bosch Dishwasher 1TDS Microwave 1Coffee Machine Delonghi Espresso Machine 2Defy Kettle 1 Plates, cutlery and etc 4Water fountain 1 Telefunken fridge 3Steel cabinets 3Rexel Laminator 5Kelvinator Fridge 2Fridge 84 Plastic chairs 3Scanners 4Bookshelves 1 Under Bar Fridge 5Visitor GM and executive chairs 13 1800x1100 swing door cabinets 32Swing door cupboards 14Managers desks 9Sliding door credenzas 1Fellowes Laminator 3 Meeting chairs 79Freestanding screens 3Two door wood cupboards 1Security Conveyor Belt Scanner 8Lockers 16Office Desks + Credenzas 85Two door Filing Cabinets 5 Lenovo Laptops 1Bauer Bar Fridge 5White board marker 1 Golf Cart 2LG Monitor 2 2 Door Defy Silver Fridge 1Whirlpool Small Bar Fridge 3Designer Lamp 1Whirlpool Microwave Oven 1Hydrobiol Dispenser 1TDS microwave Coffee Machine 1Bosch Dishwasher 1 Samsung 50" Plasma TV 16Samsung 40" Plasma TV 16Samsung 45" Plasma TV 2Proline 48" Plasma TV 1Elegance Air Conditioner 1 Delonghi Espresso Machine 2Defy Kettle DATED AT MONSTERLUS ON THIS THE 05TH DAY OF MAY 2026. MOHLALA GN ATTORNEYS ATTORNEYS FOR THE PLAINTIFF D909 UNIT B MONSTERLUS MPUDEULLE 1057 EMAIL: reception@mohlalagnattorneys.co.za godfrey@mohlalattorneys.co.za REF: MVA/mgn 8Water Dispenser

APPLICATION FOR ALTERNATIVE EMISSION STANDARDS IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 PROMULGATED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (NO 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA, VANDERBIJLPARK WORKS

Location: ArcelorMittal Vanderbijlpark Works, Delfos Boulevard, NW 7, Vanderbijlpark

Project : Application for an alternative Sulphur Dioxide (SO₂) emission limit for the Direct Reduction ("DR") Kilns in terms of Regulation 12A of Government Notice 893 (as amended) promulgated under the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:QA").

Notice is given in terms of Section (2)(4)(f) and (o) of the National Environmental Management Act (Act 107 of 1998).

Alternative Emission Standard

Notice is hereby given in terms of Sections 2(4)(f) and 2(4)(o) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), that ArcelorMittal South Africa ("AMSA") intends applying for an alternative SO₂ emission limit applicable to the Direct Reduction ("DR") Kilns at the Vanderbijlpark Works.

The Vanderbijlpark Works was operational prior to 1 April 2010 and therefore constitutes an "existing plant" in terms of the Listed Activities and Associated Minimum Emission Standards ("MES") published under Government Notice 893 (as amended).

Emission monitoring results indicate that the DR Kilns comply with the applicable new plant standards for particulate matter ("PM") and oxides of nitrogen ("NO_x"), however the kilns are unable to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³. AMSA is therefore applying for an alternative SO₂ emission limit of **1 500 mg/Nm³** for DR Kilns 4, 5 and 6.

Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works. The revised application includes updated atmospheric impact assessments, revised operational scenarios, updated health risk assessments, revised emissions reduction assessments, and updated socio-economic and operational motivations. The Atmospheric Impact Report ("AIR") and Community Health Risk Assessment ("HHRA") concluded that:

- predicted ambient SO₂ concentrations remain below the applicable National Ambient Air Quality Standards at the assessed sensitive receptor locations; and
- the proposed alternative emission limit would not result in a material increase in community health risk.

A full public participation process is being undertaken as part of the application process. To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below.

Karien Zantow
Cell: 083 384 3641
Email: info@zantow.co.za / karien@zantow.co.za

Please note that the Motivation Report and Atmospheric Impact Report will be available for review from 15 May 2026 to 16 June 2026 at the following locations: (All comments and engagement must be concluded by 16 June 2026)

Website: www.zantow.co.za (download tab)
E-mail: info@zantow.co.za / karien@zantow.co.za (on request)

A public meeting is planned for **27 May 2026**. Interested parties are requested to contact Zantow Environmental Consulting Services for further information regarding attendance and arrangements.

Maggie Webser van Centurion het die treffende foto van 'n gaboos viper en 'n vlieg geneem.



Fotograwe kuier in die natuur

Die *Elsje's Choice on Photos* Facebook-groep is 'n gratis digitale platform vir professionele fotograwe of entoesiastiese amateurs (van regoor SA en selfs ander lande) waar hulle van hul fotografie kan deel. Die groep spog reeds met sowat 1 500 lede.

Die week se wenk:

Wildfotografie verg dikwels meer geduld as tegniese vernuf, maar een van die beste wenke vir 'n treffende foto is om op ooghoogte met die dier te kom.

Net soos met portrette, is die oë die venster na die dier se siel. Maak seker die fokuspunt is presies op die oog wat naaste aan die kamera is. As die oë skerp is, is die foto gewoonlik geslaag, selfs al is die res van die lyf effens sag. Hier is van die week se topfoto's.



Trevor Rose van Bedfordview het die pragtige foto geneem.



Moederliefde! Denise Zeeman van Worcester het die pragtige foto geneem.



Carin van Deventer van Parys het die mooi foto geneem.



Wynand Potgieter van Vanderbijlpark het die pragtige foto geneem.

Skandeer die QR-kode om die volle versameling te sien.



Ruhan lewer top vermaak by ERT

• GERDA BRUNETTE

SASOLBURG – Dit was 'n aand om te onthou. Ruhan du Toit het die gehoor in die holte van sy hand gehou, vandat die eerste note opgeklink het tot sy laaste buiging op die verhoog. Sy vertoning by die Etienne Rousseau Teater (ERT) op 9 Mei was monumentaal.

Monumentaal is een van Ruhan se vele treffers en mens kon 'n speld hoor val toe hy dit gesing het. Nie dat die gehoor die heeltid net geluister het nie. Die talentvolle sanger weet hoe om die gehoor by sy vertoning te betrek.

Hy het mense aan die lag gehad met sy skerp sin vir humor en dit was ook nie lank nie toe sing almal heerlijk saam met sy FAK liedjie-medley. Van die *Oukraal-liedjie* tot by *Ver in die wêreld*, *Kittie* en *Daar*

kom die *Alibama*.

Natuurlik het sy weergawe van *Sound of Silence* weer vir hoendervleis oomblikke gesorg. Die gehoor het hoorbaar asem ingetrek met sy meesterlike vertolking van *O Sole Mio*.

Ruhan het die ERT se personeel geprys vir hul professionaliteit en gesê alles was in plek toe hy die middag opgedaag het vir

die klanktoets. Hy het die gehoor bedank dat hul sy vertoning bygewoon het en gesê hulle moet voortgaan om vertonings by te woon, sodat teaters soos die Etienne Rousseau kan oop bly. Na die vertoning het hy sy aanhangers in die voorportaal gaan groet en geduldig gestaan vir foto's met 'n vriendelike woord en glimlag vir al sy aanhangers.



Sanger Ruhan du Toit saam met Elmé Coetzee van Vanderbijlpark. Elmé sê sy het die vertoning baie geniet. Foto's: Gerda Brunette



ERT bestuurder Imile de Bruin, Ruhan du Toit, Shayne Delport en Ruan Jordaan na die vertoning.

APPLICATION FOR ALTERNATIVE EMISSION STANDARDS IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 PROMULGATED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (NO 39 OF 2004) ARCELORMITTAL SOUTH AFRICA, VANDERBIJLPARK WORKS

Location: ArcelorMittal Vanderbijlpark Works, Delfos Boulevard, NW 7, Vanderbijlpark

Project : Application for an alternative Sulphur Dioxide ("SO₂") emission limit for the Direct Reduction ("DR") Kilns in terms of Regulation 12A of Government Notice 893 (as amended) promulgated under the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA").

Notice is given in terms of Section (2)(4)(f) and (o) of the National Environmental Management Act (Act 107 of 1998).

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Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works. The revised application includes updated atmospheric impact assessments, revised operational scenarios, updated health risk assessments, revised emissions reduction assessments, and updated socio-economic and operational motivations. The Atmospheric Impact Report ("AIR") and Community Health Risk Assessment ("HHRA") concluded that:

- predicted ambient SO₂ concentrations remain below the applicable National Ambient Air Quality Standards at the assessed sensitive receptor locations; and
- the proposed alternative emission limit would not result in a material increase in community health risk.

A full public participation process is being undertaken as part of the application process.

To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below.

Karien Zantow

Cell: 083 384 3641

Email: info@zantow.co.za / karien@zantow.co.za

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E-mail: info@zantow.co.za / karien@zantow.co.za (on request)

A public meeting is planned for 27 May 2026. Interested parties are requested to contact Zantow Environmental Consulting Services for further information regarding attendance and arrangements.

XM001177

0950 Legal Notices

Trying to locate **Christo Laubscher** in regards to born child on 16 October 2021, please contact me on **076 894 9201**. OM24850

KENNISGEWING VIR 'N AANSOEK INGEVOLGE ARTIKEL 38(2) VAN DIE EMFULUNI MUNISIPALITEIT RUIMTELIKE BEPLANNING EN GRONDGEWIKBESTUUR VERORDENING, 2018, TEN OPSIGTE VAN GEDEELTE 232 ('N GEDEELTE VAN GEDEELTE 2 (KROMGENOEG)) VAN DIE PLAAS VLAKFONTEIN 546 I.Q.

Ek, Mnr. C.F. de Jager van Pace Plan Consultants, synde die gemagtigde agent van die eienaar van Gedeelte 232 van die plaas Vlakfontein 546 I.Q., geleë noordoos van Dadaville Dorpsgebied, Vereeniging, gee hiermee kennis ingevolge Artikel 38(2) vir die aansoek ingedien by Emfuleni Plaaslike Munisipaliteit ingevolge Artikels 38 van die Emfuleni Munisipaliteit Ruimtelike Beplanning en Grondgebruiksbestuur Verordeninge, 2018, vir die wysiging van die Emfuleni Grondgebruikskema, 2023, deur die herosenering van die bo-genoemde eiendom vanaf "Spesiaal" vir landbou doeleindes en 7 wooneenhede na "Spesiaal" vir landbou doeleindes en 8 wooneenhede.

Besonderhede van die aansoek sal ter insae lê gedurende normale kantoorure by die kantoor van die Strategiese Bestuurder: Grondgebruiksbestuur, Eerste vloer, Ou Trust Bank Gebou, hoek van President Krugerstraat en Eric Louwstraat, Vanderbijlpark en die kantoor van die agent hieronder, vir 'n tydperk van 28 dae vanaf datum van eerste publikasie. Besware teen of verhoë ten opsigte van die aansoek moet binne 'n tydperk van 28 dae vanaf datum van eerste publikasie, skriftelik by die Munisipale Bestuurder by bogemelde adres of by Posbus 3, Vanderbijlpark, 1900, ingedien of gerig word of gefaks word na 0169505533. Agent adres: Pace Plan Consultants, 70A Chopinstraat, Vanderbijlpark SW 5, 11691, Tel: 0834465872, christo@paceplan.co.za DATUM VAN EERSTE PUBLIKASIE: 20 MEI 2026 OM24820

Vaalweekblad
GRATIS www.vaalweekblad.com



Deceased Estate

Call: Anne-Marie 066 578 1132

Email: annemarie@mooivaal.co.za

0950 Legal Notices

Annexure D6

Public Meeting



PUBLIC PARTICIPATION MEETING FOR THE APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

Venue: Stonehaven

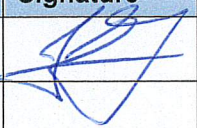
Time: 9:00 to 11:00

Applicant: ArcelorMittal South Africa Limited, Vanderbijlpark Works

Date: 27 May 2026

Name & Surname	Organisation/Private Individual	E-mail address	Signature
Zack Karkake	Extinction Rebellion Usal	zacharia.kalake at gmail.com	
Richard Madimabe	Bolle Ba Thabo	richard.Madimabe@gmail.com	
T. Masike	VEJA	tlabo teeliga@gmail.com	
B. Mawaka	VEJA	Mawakamantso@veja.org.za	
Mduduzi Tshabalala	VEJA	mduduzit@veja.org.za	
Thandi Ngqango	VEJA	thandineveja.org.za	
Sharon ISUINYANE	VEJA	osuiyane@gmail.com	
Ilye BROEKMAN	AMSA	ilye.broekman	
Phokozani Mapogasha	VEJA	eliasthokozaniz@gmail.com	

→ Send Report.

Name & Surname	Organisation/Private Individual	E-mail address	Signature
J Holdings	AmSA	johs.holding@caradormittel.com	

ARCELORMITTAL VANDERBIJLPARK WORKS

SOUTH AFRICA

SECTION 12A APPLICATION

IN TERMS OF REGULATION GN 893

ArcelorMittal South Africa is the largest maker of long and flat steel products in Africa with its Vanderbijlpark Works producing flat steel products. The ArcelorMittal Vanderbijlpark Works, located in the heavy industrial area (NW7) of Vanderbijlpark has been in operation for more than 80 years.



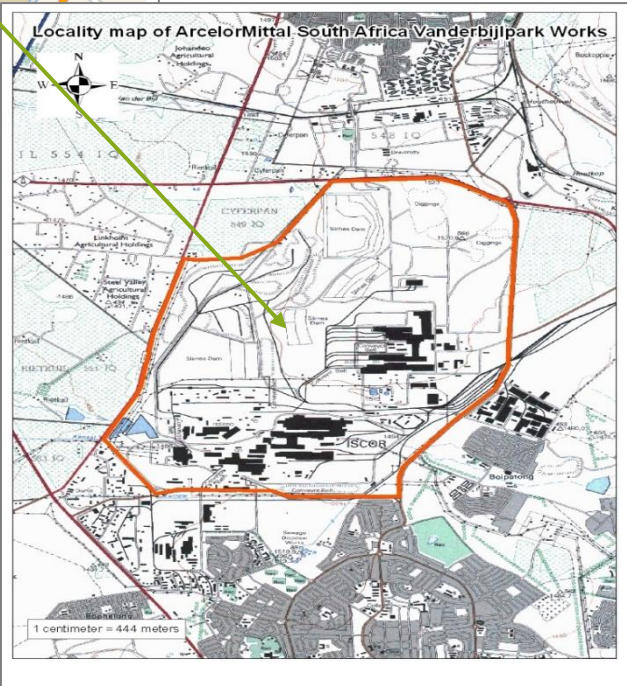
The ArcelorMittal Vanderbijlpark Works holds a valid Atmospheric Emissions License (AEL 0003/SDM/2012) (AEL) as issued by the Sedibeng District Municipality on the 29th September 2023.

The following Listed Activities published in GN 893 (as amended) in terms of Section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) are therefore authorised;

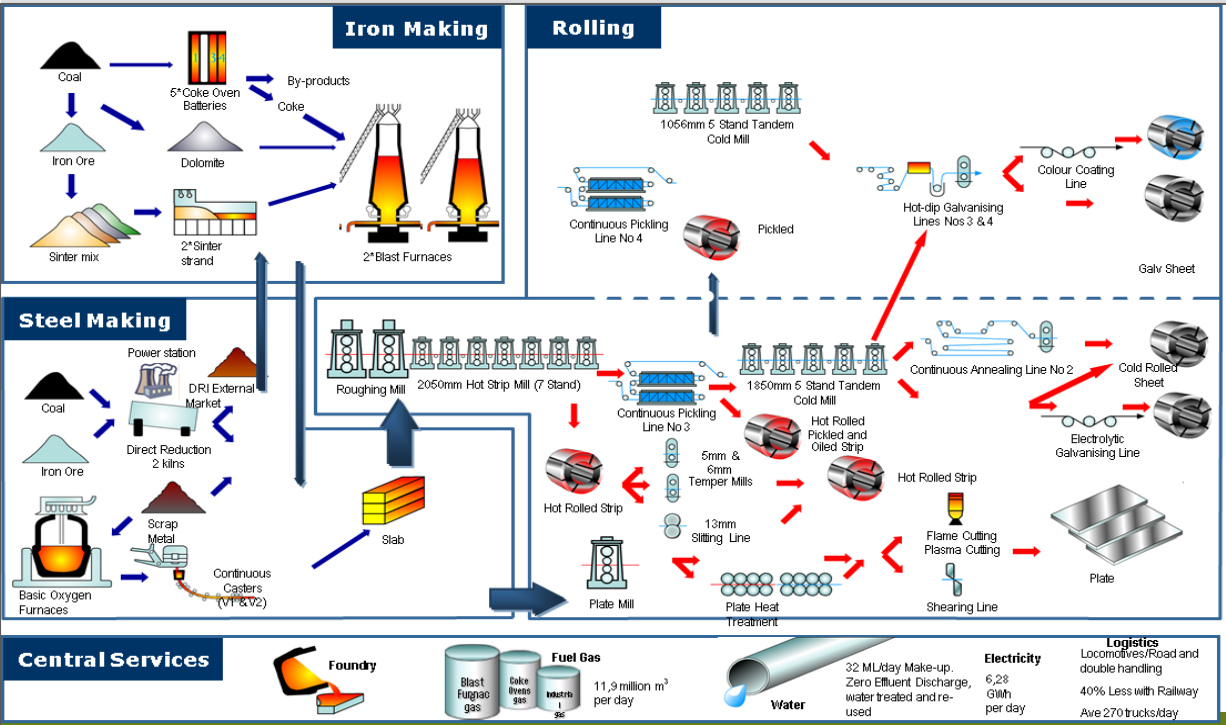
The Works is an Integrated Steel Manufacturing facility that produces a wide range of flat steel products by utilizing a series of primary and subprocesses, each with different input materials.

Raw material such as iron ore, coal, scrap metals, alloys, refining materials, and other materials are used to produce a range of flat steel products

The ArcelorMittal Vanderbijlpark Works covers approximately 2 450 ha in extent and is zoned as Industrial Type 2, which permits industrial activity, and the disposal of residue generated.



ArcelorMittal South Africa, Vanderbijlpark Works is an integrated steel works. The operations are made up of several industrial processes which combine to form the great operations. The first phase of operations is focused on iron making which is then convert to steel which is then used to produce flat steel products.



NEMAQA S21 -

- Subcategory 1.4: Gas Combustion Installations
- Subcategory 3.1: Combustion Installations
- Subcategory 3.2: Coke Production
- Subcategory 3.3: Tar Processes
- Subcategory 4.2 Combustion Installations
- Subcategory 4.5: Sinter Plants
- Subcategory 4.6: Basic Oxygen Furnaces (Primary and Secondary)
- Subcategory 4.7: Electric Arc Furnaces (Primary and Secondary)
- Subcategory 4.8: Blast Furnaces
- Subcategory 4.10: Foundries
- Subcategory 4.11: Agglomeration Operations
- Subcategory 4.12: Pre-Reduction and Direct Reduction
- Subcategory 4.22: Hot Dip Galvanizing
- Subcategory 5.1: Storage and Handling of Ore and Coal
- Subcategory 7.2: Production of Acids



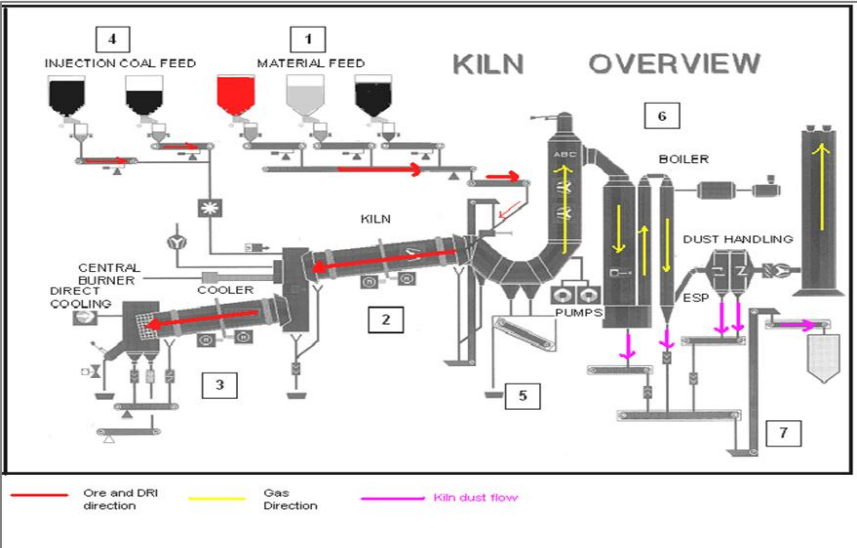
ARCELORMITTAL VANDERBIJLPARK WORKS SOUTH AFRICA

DRI KILNS AND APPROVED EMISSION LIMITS

The Direct Reduction route is an alternative iron making route, which utilizes coal to reduce iron ore. At Vanderbijlpark Works, six rotary kilns are used to heat iron ore, coal and additives to produce sponge iron, which is then utilized in the blast furnaces and the steel making plant.

The waste gases from the process are drawn off the process and sent through a waste heat boiler to generate process steam. Dust particles are removed from this waste gas stream in the Electrostatic Precipitator (ESP), before the waste gas is discharged to atmosphere through the main stack. An emergency stack is also located between the kiln and the boiler which is only used during upset conditions.

This serves as a safety device for the boiler, should there be an unplanned boiler outage, and would result in pollution generation for the time that it takes to put the kiln process offline. There are presently 6 kiln / boiler trains in operation.



ArcelorMittal Vanderbijlpark Works was in operation prior to 1 April 2010 and is therefore regarded as “*existing plant*” in terms of GN 893 which contains the Minimum Emissions Standards (MES) in terms of NEM:AQA.

- Existing plants were required to comply with the MES for new plants by 1 April 2020 unless otherwise specified or subject to a *postponement*.
- On the 29th March 2019, ArcelorMittal was granted a once off postponement with the alternative emission standards at the DR Kilns

NEMAQA S21 Category	Appliance	Postponement / Alternative Timeframe	Pollutant	MES (mg/Nm3)	Postponement / Alternative Emission Limit (mg/Nm3)	Current Emissions
				New Plant (2020)		
Subcategory 4.12: Pre-reduction and Direct Reduction “ <i>Production of pre-reduced or metallised ore or pellets using gaseous or solid fuels</i> ”	DR Kiln Stack 3	2020-2025	Sulphur dioxide (SO2)	500	800	+/- 1 330
	DR Kiln Stack 4				500	+/- 1 330
	DR Kiln Stack 5				700	+/- 1 330
	DR Kiln Stack 6				750	+/- 1 330

SO₂ emissions from the DRI Kiln Stacks indicate that the new plant levels cannot be achieved, an alternative limit is being requested.



ARCELORMITTAL VANDERBIJLPARK WORKS

SOUTH AFRICA

DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS

Stack emissions monitoring results between 2020 to 2025 indicate that all PM and NO_x emissions at the DR Kilns are compliant with the MES for new plants, however SO₂ emission levels, have not been able to achieve the MES for new plants nor the alternative limit as approved in terms of the postponement granted on the 23rd March 2020.

Paragraph 12(A) of GN 893 as amended to state that;

- a. “An existing plant may submit an application regarding a new plant standard to the National Air Quality Officer for consideration if the plant is in compliance with other emission standards but cannot comply with a particular pollutant or pollutants.
- b. An application must demonstrate a previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.
- c. The National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if:
 - i. there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or
 - ii. the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard

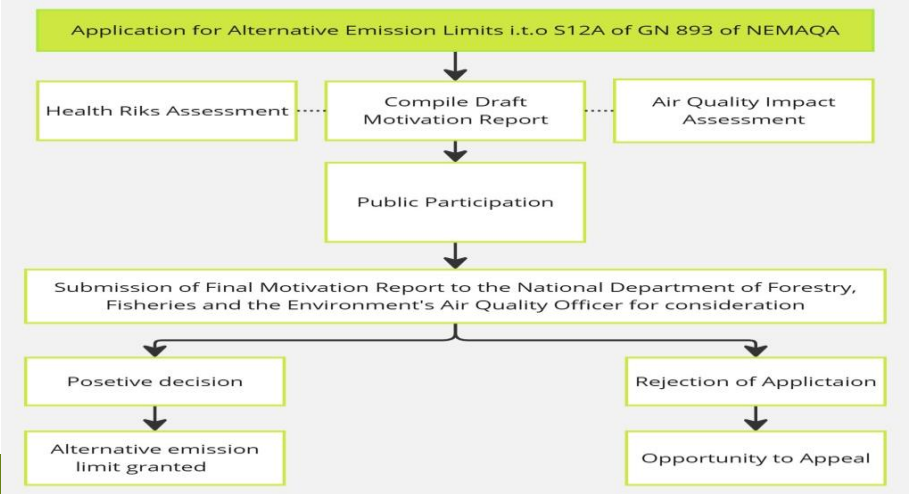
MOTIVATION AND APPLICATION PROCESS

Paragraph 12(A) of GN 893 as amended, requires the applicant (ArcelorMittal Vanderbijlpark Works) to provide an application with motivation on the following requirements;

- Compliance levels to other pollutants emission limits at the DR Kilns
- Previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.
- Acceptable ambient air quality for the pollutant in question compared to the National ambient air quality standards in the area
- An Atmospheric Impact Report which indicates the increased health risk where there is no ambient air quality standard

In order to achieve the required goal, ArcelorMittal must first apply for alternative emission limits at the DR Kilns in terms of SO₂.

NEMAQA S21 Category	Appliance	Postponement / Alternative Timeframe	Minimum Emission Standards (mg/Nm ³)			Requested Alternative Emission Standard
			Pollutant	Existing Plant 2015	New Plant 2020	
Subcategory 4.12: Pre-reduction and Direct Reduction “Production of pre-reduced or metallised ore or pellets using gaseous or solid fuels”	DR Kiln Stack 1	1 April 2025 Up to April 2035	Sulphur dioxide (SO ₂)	1 700	500	Plant shut down
	DR Kiln Stack 2					Plant shut down
	DR Kiln Stack 3					Plant shut down
	DR Kiln Stack 4					1 500 mg/Nm ³
	DR Kiln Stack 5					1 500 mg/Nm ³
	DR Kiln Stack 6					1 500 mg/Nm ³



ARCELORMITTAL VANDERBIJLPARK WORKS

SOUTH AFRICA

DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS

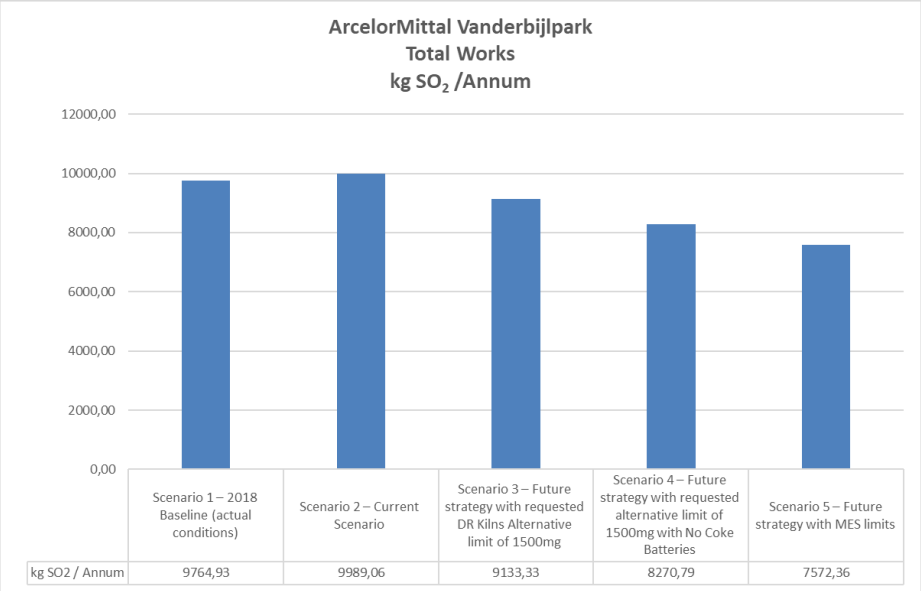
ATMOSPHERIC IMPACT REPORT

Regulation 12A of GN 893 stipulates that the competent authorities can approve the alternative emissions, if there is no material exceedance of the ambient air quality limits for the particular pollutant in questions (i.e. SO₂) and or where there is no ambient standard “*the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard*”.

In order to assist the competent authority decision making process as well as stakeholder engagement, an Atmospheric Impact Report (AIR) was undertaken by Airshed Planning Professionals (Pty) Ltd in support of the application for alternative Emission Standards.

It is anticipated that each source identified above will require five scenarios to be modelled, in order to establish the delta impacts against the baselines. i.e.:

- Scenario 1 – Baseline Actual Conditions
- Scenario 2 – Current Operational Scenario
- Scenario 3 – Future Operational Strategy with Alternative Emission Limit of 1 500 mg/Nm³
- Scenario 4 – Future Operational Scenario without Coke Battery 4
- Scenario 5 – Future Operational Scenario Assuming MES Compliance at the DR Kilns



Total Works SO2 Load (Tons per annum) per scenario

The shutdown of certain plants, have and will result in the reduced emission load emitted.

- Shut down of Coke Oven Battery 6 (2024)
- Shut down of Coke Oven Battery 7 (2024)
- Shut down of Coke Oven Battery 8 (2025)
- Shut down of Coke Oven Battery 9 (2025)

Changes in process flow and plants to optimise operations.

- Operate 3 x DR Kilns (2 operated with 1 on standby and maintenance) at alternative emission limits.
- Operate only 1 Coke Battery (Battery 4) in its current state until 2040, whereafter it will be decommissioned.
- Import all required coke from outside of South Africa.

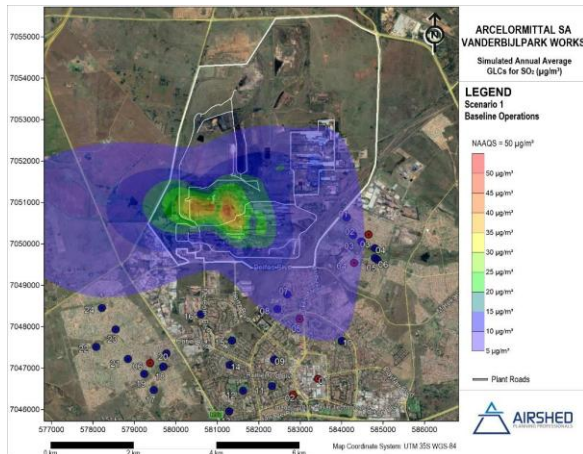
Changes in the previous decarbonisation strategy

- No longer planning to construct two new Coke Batteries.
- No longer planning to construct and commission a new Gas Cleaning and Desulphurisation plant.
- No longer proposes to construct a new Electric Arc Furnace (EAF) and operate only two of the three BOF furnaces.
- No longer planning to decommission part of the iron making facilities.

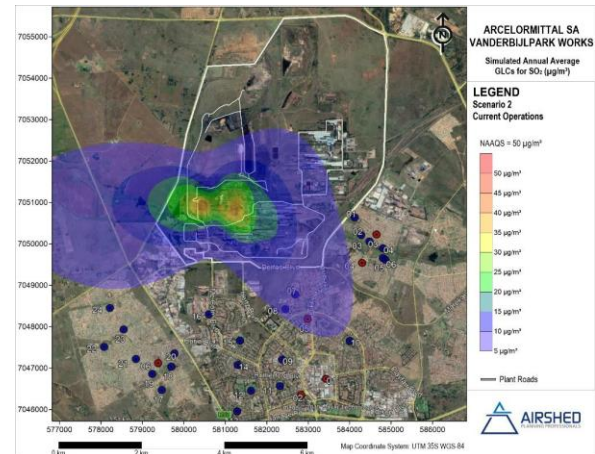
ARCELORMITTAL VANDERBIJLPARK WORKS SOUTH AFRICA

DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS ATMOSPHERIC IMPACT REPORT

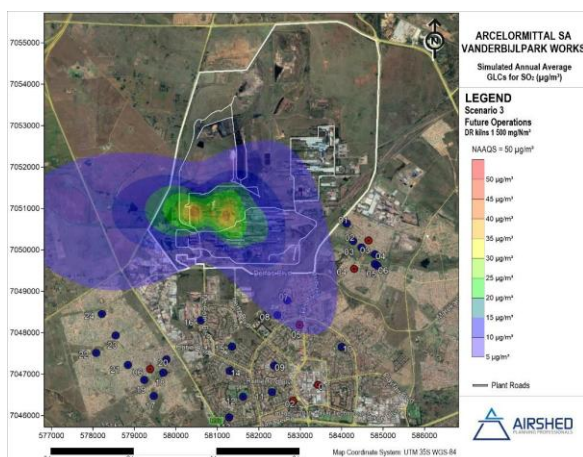
The main objective of the assessment was to evaluate the impact of the Direct Reduction Kilns and associated activities at ArcelorMittal Vanderbijlpark Works on the ambient air quality of the surrounding areas.



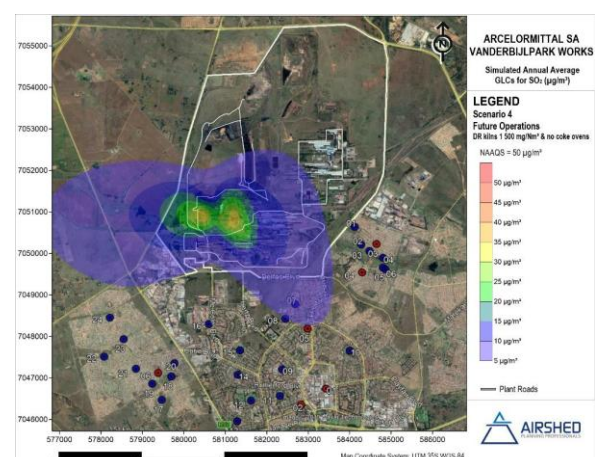
Baseline Model – Scenario 1 SO2 Annual Average



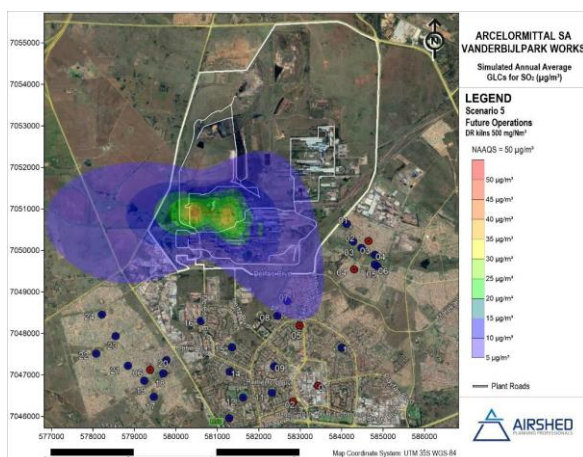
Baseline Model – Scenario 2 SO2 Annual Average



Future Scenario 3 – SO2 Annual Average



Future Scenario 4 – SO2 Annual Average



Future Scenario 5 – SO2 Annual Average

Summary and Conclusion of AQIR

- The scenarios will result in a decrease of ground-level SO2 concentrations (on the average at the selected receptors for annual) of 12%, 18%, 25% and 27% for scenario 2, 3, 4 and 5 respectively.
- Dispersion modelling shows that simulated concentrations at all AQSRs would be within NAAQS for all the scenarios.

ARCELORMITTAL VANDERBIJLPARK WORKS SOUTH AFRICA

DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS HEALTH RISK ASSESSMENT

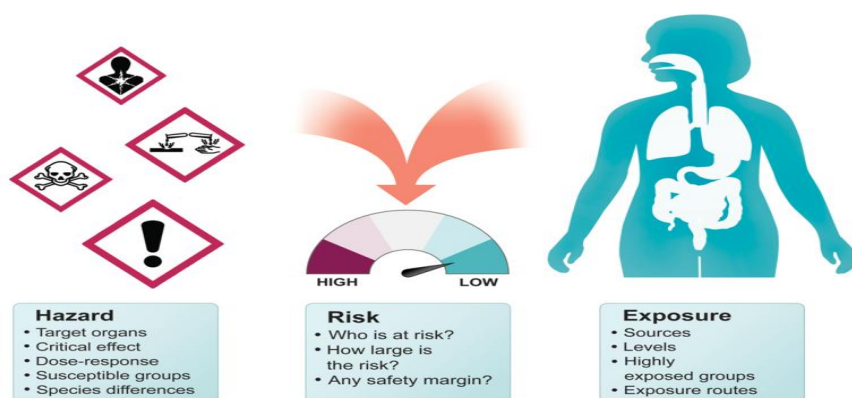


What is a health risk assessment?

- In general, predicted (modelled) or measured (monitored) impacts of industrial emissions on air concentrations are used as a basis to quantify impacts on health.
- This is achieved by calculating the potential increase in or contribution to hospital admissions or mortality due to specific causes, associated with air concentrations of specific pollutants.
- These calculations are based on results of epidemiological studies reported in the international scientific literature in which statistical methods were used to compare changes in hospitalization or mortality rates with changes in air quality.
- Current statistical methods use the concept of relative risk ("RR") to derive the potential percentage increase in or contribution to effects.
- The potential increase in the risk of death or hospital admission due to a specific health effect associated with the concentration of a pollutant contributed by a specific source (for example, ArcelorMittal operations) is calculated based on the attributable fraction ("AF").
- The AF may be considered as the fraction of cases in the exposed population that could be prevented if exposure to the pollutant was eliminated.

Findings

- Percentage of cases of asthma exacerbation attributable to SO₂ emissions, and percentage of cases of natural mortality attributable to SO₂ emissions from the ArcelorMittal project, were calculated.
- All cases were below 5 percent. The attributable fraction ("AF") is another way of presenting percentage values, for example for 5 per cent of cases, attributable to emissions from ArcelorMittal, the AF is 0.05.
- AFs in the order of < 0.001 to 0.05 indicate an increased risk of a health effect in the range of less than 0.1 to 5 per cent, under the modelled air quality conditions at the various receptors.
- The implication of such low AFs is that, for all practical intents and purposes, the associated health risks will be insignificantly different from current or background risks.
- Calculated AFs for cases of asthma exacerbation and natural mortality at all receptor locations fall in this category.
- All cases were below 5 percent.
- The implication of such low AFs is that, for all practical intents and purposes, the associated health risks will be insignificantly different from current or background risks. Calculated AFs for cases of asthma exacerbation and natural mortality at all receptor locations fall in this category.



Summary and Conclusion of Health Risk Assessment

- Modelled results for SO₂ releases from all sources at the ArcelorMittal Vanderbijlpark Works, with emissions from the DR kilns set at the proposed MES of 1 500 mg/Nm³ for some of the scenarios, indicated insignificant health risks at all receptor locations.
- Overall, it can be concluded that community health risks due to ambient air concentrations of SO₂ at the receptor locations would be insignificant for all release scenarios from the ArcelorMittal Vanderbijlpark Works if the alternative MES of 1 500 mg/Nm³ is applied.

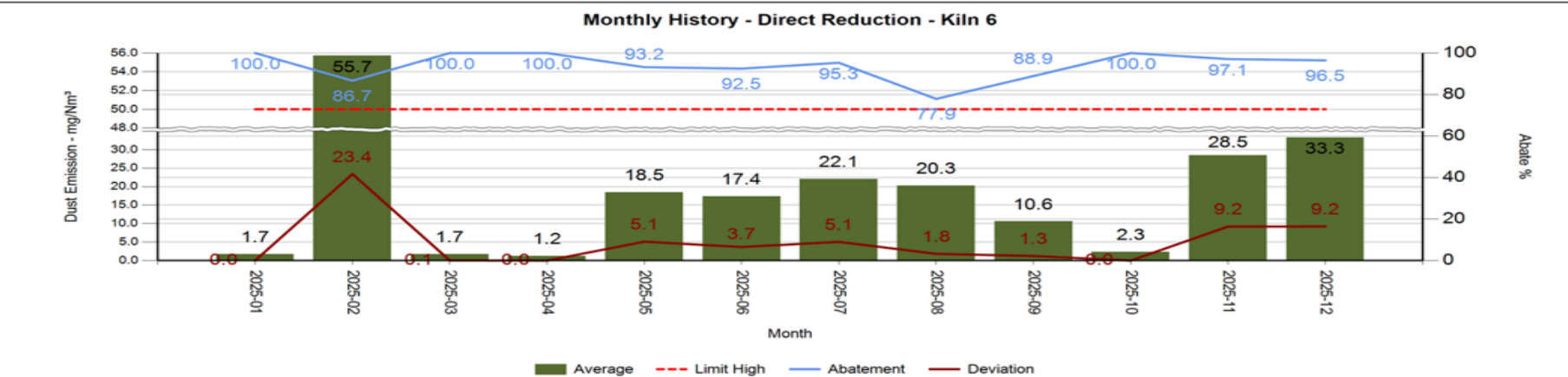
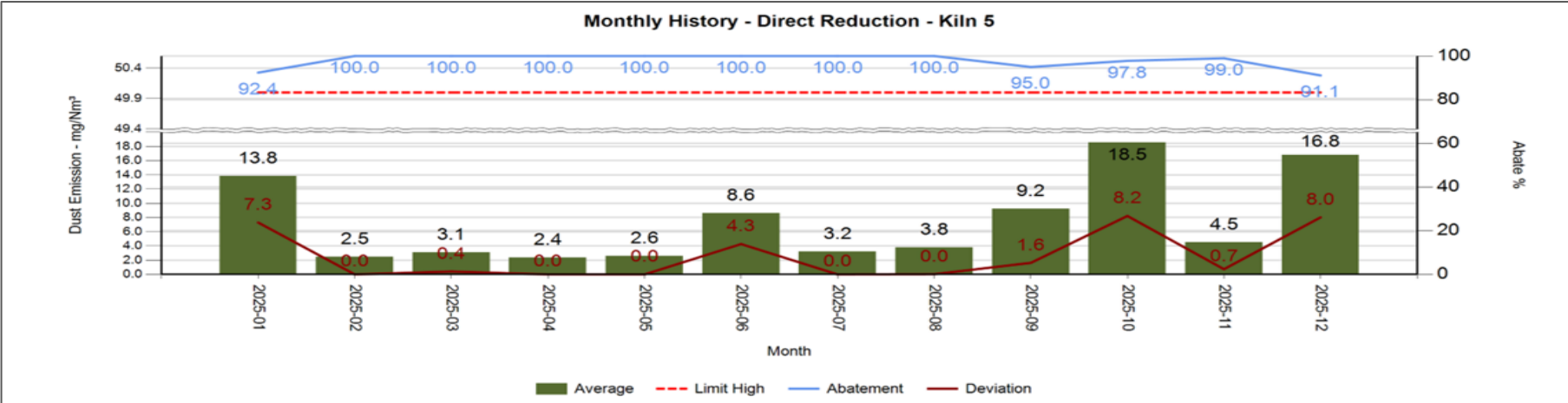
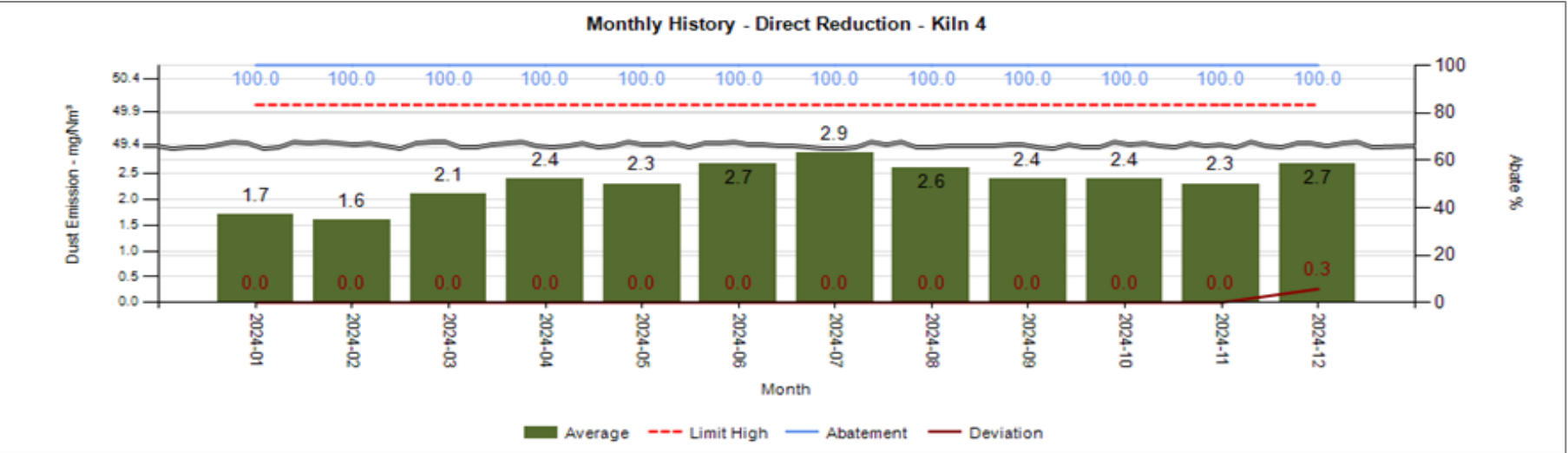
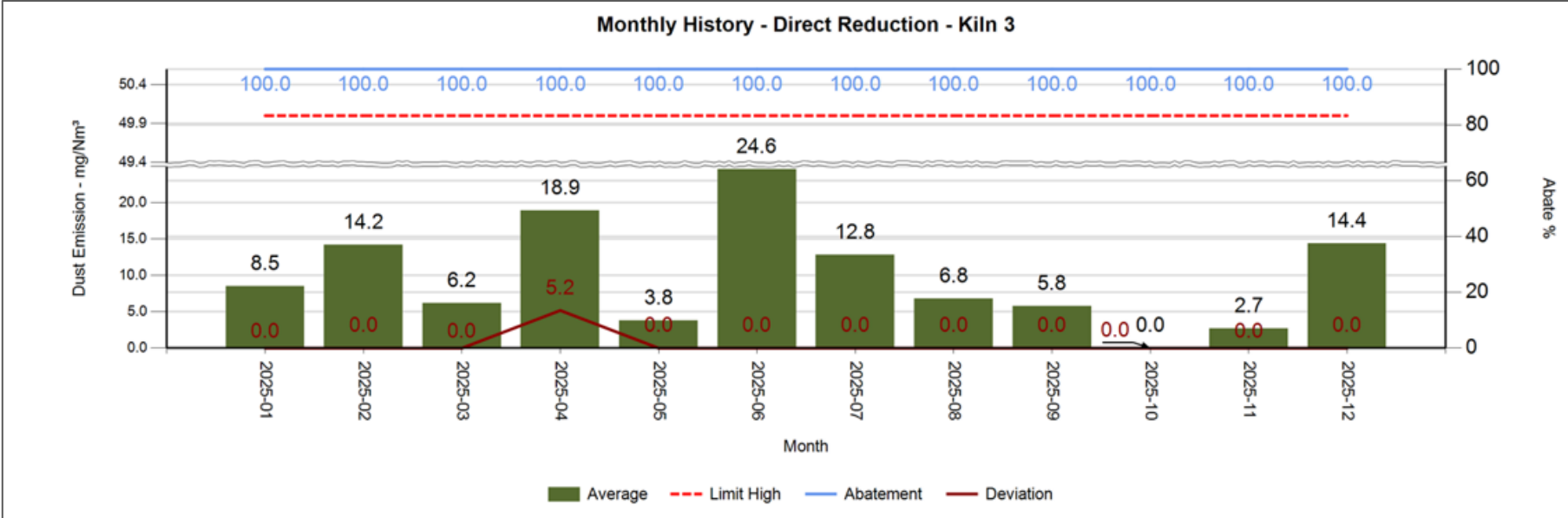
ARCELORMITTAL VANDERBIJLPARK WORKS
SOUTH AFRICA

ARCELORMITTAL

DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS
MOTIVATION

Compliance levels to other emission limits at the plant

DR Kilns 1-6 are compliant with the other pollutants emission limits in terms of PM and NOx.

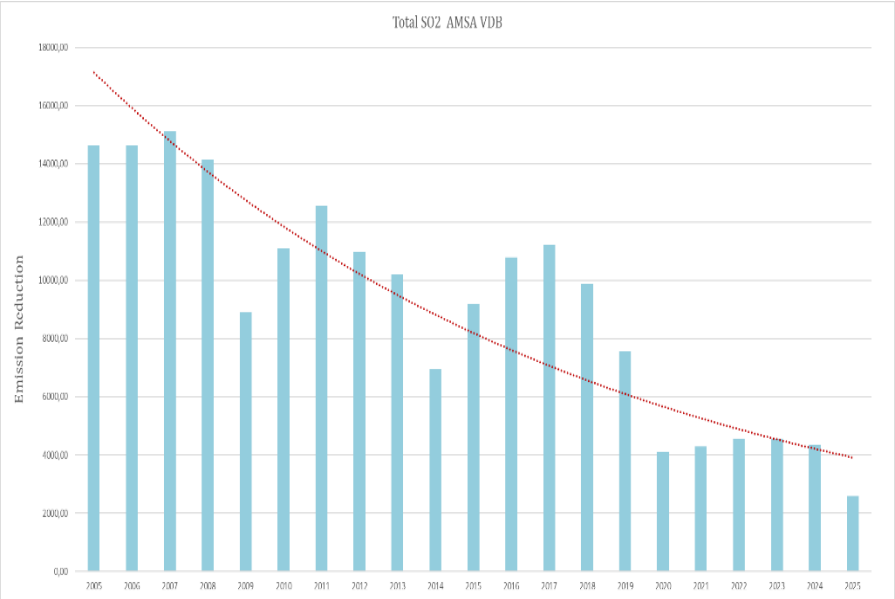


ARCELORMITTAL VANDERBIJLPARK WORKS
SOUTH AFRICA
DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS
MOTIVATION

ArcelorMittal

Previous reduction in emissions of the said pollutant or pollutants, measures and direct investments implemented towards compliance with the relevant new plant standards.

Point Source Code	Pollutant Name	Maximum Emissions Release Rate (until 31 March 25)	Actual avg for 2020	Actual avg for 2021	Actual avg for 2022	Actual avg for 2023	Actual avg for 2024	Actual avg release rate for 2025	Compliance status
DR Kiln 1	SO ₂	500	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
DR Kiln 2	SO ₂	500	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off	Plant off
DR Kiln 3	SO ₂	800**	Plant off	Plant off	1285	927	1055	Plant off	Plant off
DR Kiln 4	SO ₂	500	862	955	2046.13	1524	Plant off	Plant off	Plant off
DR Kiln 5	SO ₂	500	977	996	1203.51	1186	1117	1119	Non Compliance
DR Kiln 6	SO ₂	750**	785	1065	632	1204	1023	1182	Partial Compliance



Emission Trend and overall reduction for SO2

Significant improvements and reductions of 79% in terms of SO2 for the overall emissions have been made in the last 20 years, and therefore already reduced the SO2 emission footprint.

Motivation on Sulphur Load Reduction

- No successful measures have been implemented to reduce the SO2 emissions at the DR Kilns.
- The use of flue gas desulphurization techniques at the DR Kilns is uneconomical.
 - Operational controls and management of the coal quality has resulted in some reduction but is not sufficient to make a notable difference.
- It is therefore recommended that the Competent Authority approve the requested alternative SO₂ emission limit of 1 500 mg/Nm³ for DR Kilns 4, 5 and 6, with DR Kilns 1, 2 and 3 remaining permanently shut down, for the proposed interim period up to April 2035, subject to:
 - continued emissions monitoring and reporting;
 - ongoing investigation into technically feasible SO₂ reduction technologies;
 - continued implementation of broader operational optimisation and emissions reduction measures at the Vanderbijlpark Works; and
 - ongoing regulatory engagement and review processes as may be required by the Competent Authority.

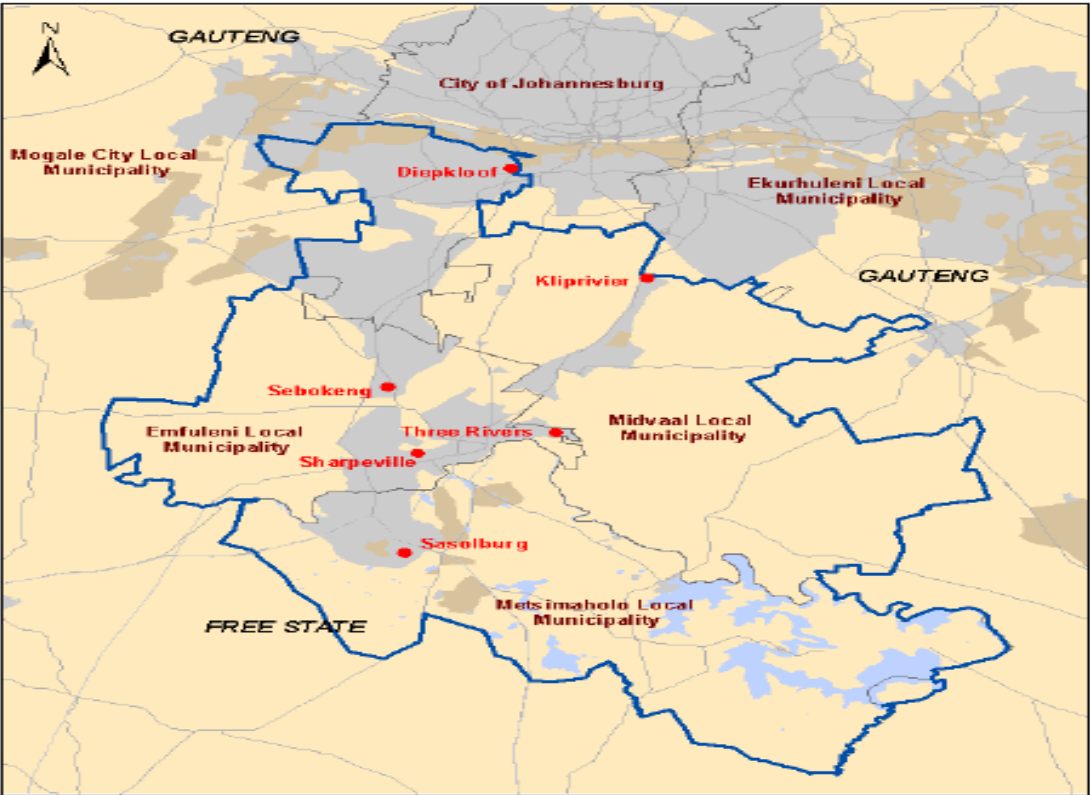
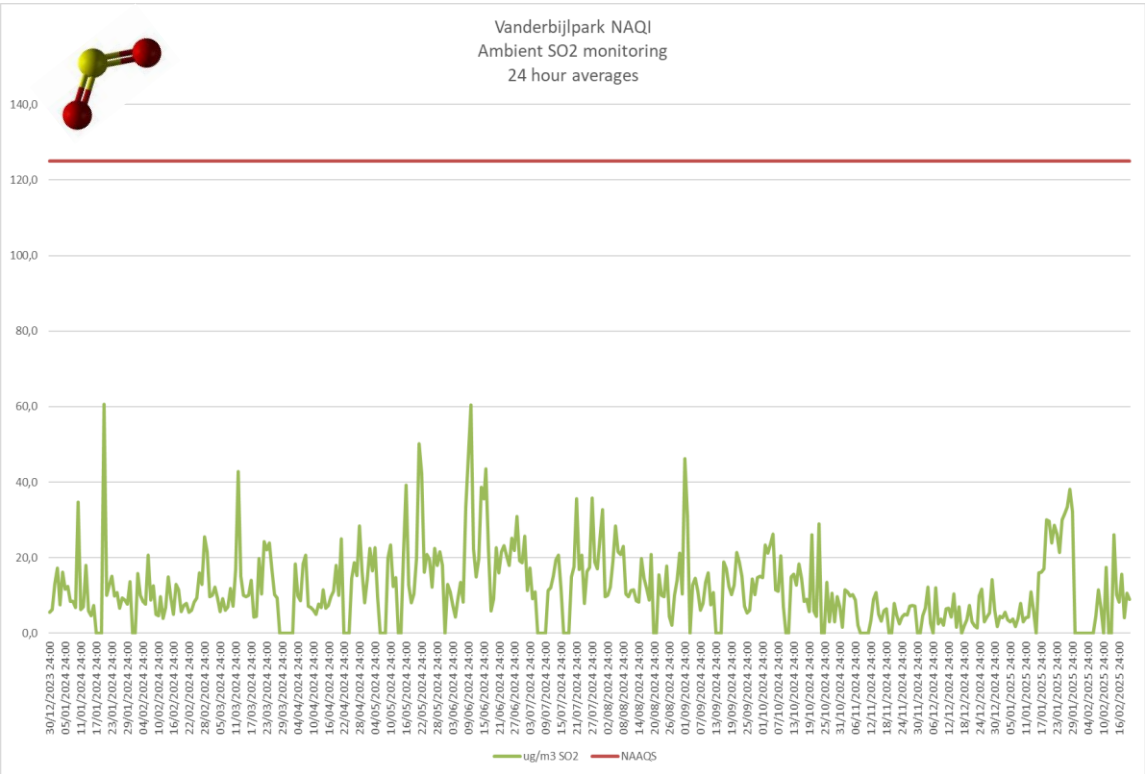
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SOUTH AFRICA
DRI KILNS APPLICATION FOR ALTERNATIVE EMISSION LIMITS
MOTIVATION

ArcelorMittal

Acceptable ambient air quality for the pollutant in question compared to the National ambient air quality standards in the area.

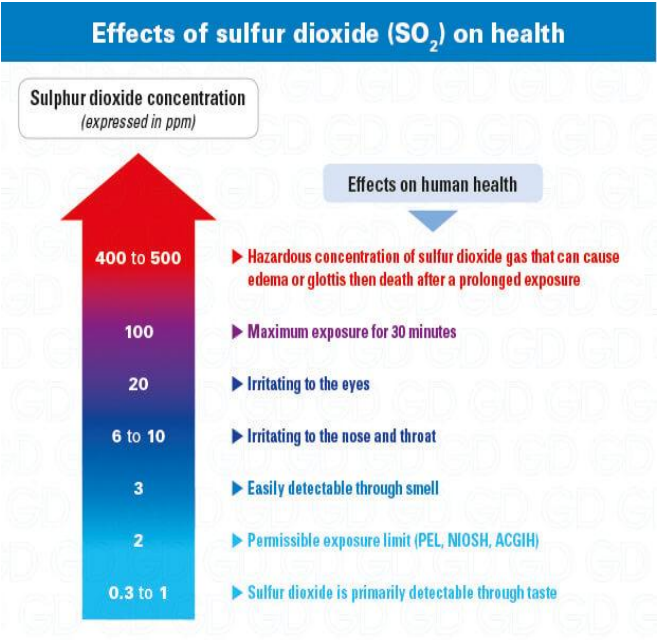
The national ambient air quality standard for sulphur dioxide (SO₂) in South Africa is 60 µg/m³ for annual averages and 80 µg/m³ for 24-hour averages. The actual measured SO₂ ambient concentrations from the Sedibeng Municipality Ambient air quality station located in Vanderbijlpark, (<https://saaqis.environment.gov.za>) is presented below.

Pollutant	Averaging Period	Concentration (µg/m³)	Frequency of Exceedance	Compliance Date
Sulphur Dioxide (SO ₂)	10 minutes	500	526	Immediate
	1 hour	350	88	Immediate
	24 hour	125	4	Immediate
	1 year	50	0	Immediate



How is it measured by DFEF?

Sulphur dioxide is measured continuously by the principle of absorb ultraviolet (UV) light. The sample is drawn through the sample bulkhead through a hydrocarbon “kicker”, which removes hydrocarbons from the sample by forcing the hydrocarbon molecules to permeate through the tube wall. The sample flows into the fluorescence chamber, where pulsating UV light excites the SO₂ molecules. As the excited SO₂ molecules decay to lower energy states, they emit UV light that is proportional to the SO₂ concentration.



The SO₂ ambient air quality measured by the ambient air quality stations in the Vaal Triangle and surrounding area, indicates material compliance to the SO₂ ambient air quality standards

PUBLIC PARTICIPATION MEETING FOR THE APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

Name	Richard Madimabe
Cell Number:	071 874 3872
Email:	richard.madimabe@gmail.com
Organisation:	Bottle Ba Tlhabu Environmental Group
Comment	I would like if the organisers can email me reports of posters presented. Kind regards Richard.

Mbali Zwane

From: Benj van der Merwe
Sent: Wednesday, 27 May 2026 12:07
To: 'richardmadimabe@gmail.com'
Subject: AMSA - 12A Application - Posters
Attachments: Posters - 27 May 2026.pptx

Good day Richard,

Hope you are well.

Please find attached posters as requested.

Kind Regards
Benj v.d. Merwe



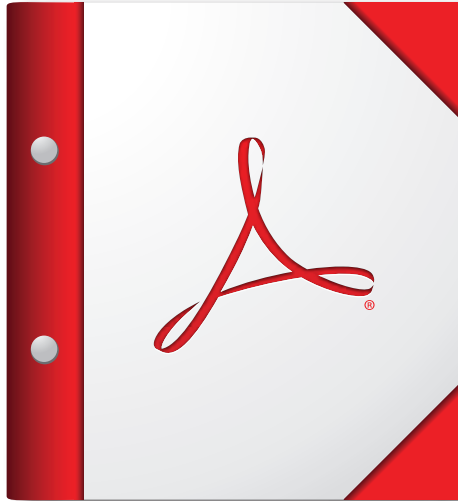
Benj van der Merwe
Administrator
T: 082 300 3536 F: 016 932 4976
E: info@zantow.co.za
www.zantow.co.za

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Annexure D7

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AMSA Vanderbijlpark Works Main Gate
Delfos Blvd
Vanderbijlpark
1901

HAND DELIVERED

15th May 2026

CONFIRMATION OF DOCUMENTS DELIVERED FOR SUBMISSION

I hereby confirm delivery and receipt of the following documentation:

- One (1) hard copy of the Draft Application for an Alternative So₂ Emission Limit in Terms of Regulation 12a of Government Notice 893 (As Amended) Promulgated Under the National Environmental Management: Air Quality Act, 2004 (Act No. 39 Of 2004)) at AMSA Vanderbijlpark.

Zelda.

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mf

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Vanderbijlpark
1911



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15th May 2026

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MOJI IQHABALALA
Name:

[Signature]
Signature:

MANAGER LIS
Designation

15.05.2026
Date:

Sedibeng District Municipality
Micheal Nemanganya
Air Quality Officer
Meriman Street
Vereeniging
1830

HAND DELIVERED

15th May 2026

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Nemanganya N
Name:

[Signature]
Signature:

Air Quality Officer
Designation

15/05/2026
Date:

Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: SXaba@dfpe.gov.za; pgwaze@dfpe.gov.za; Ricca Marowe
Cc: Karien Zantow
Subject: Draft Application for an Alternative SO₂ Emission Limit at AMSA Vanderbijlpark
Attachments: 0. Cover letter for draft S12A Report.pdf

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	SXaba@dfpe.gov.za		
	pgwaze@dfpe.gov.za		
	Ricca Marowe		
	Karien Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/16 11:08

Dear Competent Authority,

Please find attached the cover letter, as well as the WeTransfer link to access the Draft Application for an Alternative SO₂ Emission Limit for AMSA Vanderbijlpark Works, Gauteng:

<https://we.tl/t-q7A426cHMEhEGpET>

Kindly note that the link will remain active for three (3) days from the date of this email.

Should you have any comments, concerns, or queries regarding the application, please submit them by **15 June 2026**.

Kind Regards
Mbali



Mbali Zwane
Environmental Consultant
SACNASP Reg Nr 170448
T: 081 375 4647
E: mbali@zantow.co.za
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Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: aseefa@emfuleni.gov.za; zamanim@emfuleni.gov.za
Cc: Karien Zantow
Subject: Draft Application for an Alternative SO₂ Emission Limit at AMSA Vanderbijlpark

Tracking:	Recipient	Delivery	Read
	aseefa@emfuleni.gov.za		
	zamanim@emfuleni.gov.za		
	Karien Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/16 11:08

Dear Mr Ahmed and Mr Mabena,

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Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 07:56
To: MUDITAMBI, LYDIA (GDARD)
Cc: Karien Zantow
Subject: Draft Application for an Alternative SO₂ Emission Limit at AMSA Vanderbijlpark

Tracking:	Recipient	Delivery	Read
	MUDITAMBI, LYDIA (GDARD)		
	Karien Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/16 11:08

Dear Ms Lydia Muditambi

Please find attached WeTransfer link to access the Draft Application for an Alternative SO₂ Emission Limit for AMSA Vanderbijlpark Works, Gauteng:

<https://we.tl/t-q7A426cHMEhEGpET>

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Kind Regards
Mbali



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Mbali Zwane

From: Mbali Zwane
Sent: Friday, 15 May 2026 08:01
To: 'MichaelN@sedibeng.gov.za'; NesaneN@sedibeng.gov.za
Cc: Karien Zantow
Subject: Draft Application for an Alternative SO₂ Emission Limit at AMSA Vanderbijlpark

Tracking:	Recipient	Delivery	Read
	'MichaelN@sedibeng.gov.za'		
	NesaneN@sedibeng.gov.za		
	Karien Zantow	Delivered: 2026/05/15 08:01	Read: 2026/05/16 11:08

Dear Michael and Nesane,

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<https://we.tl/t-q7A426cHMEhEGpET>

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Mbali

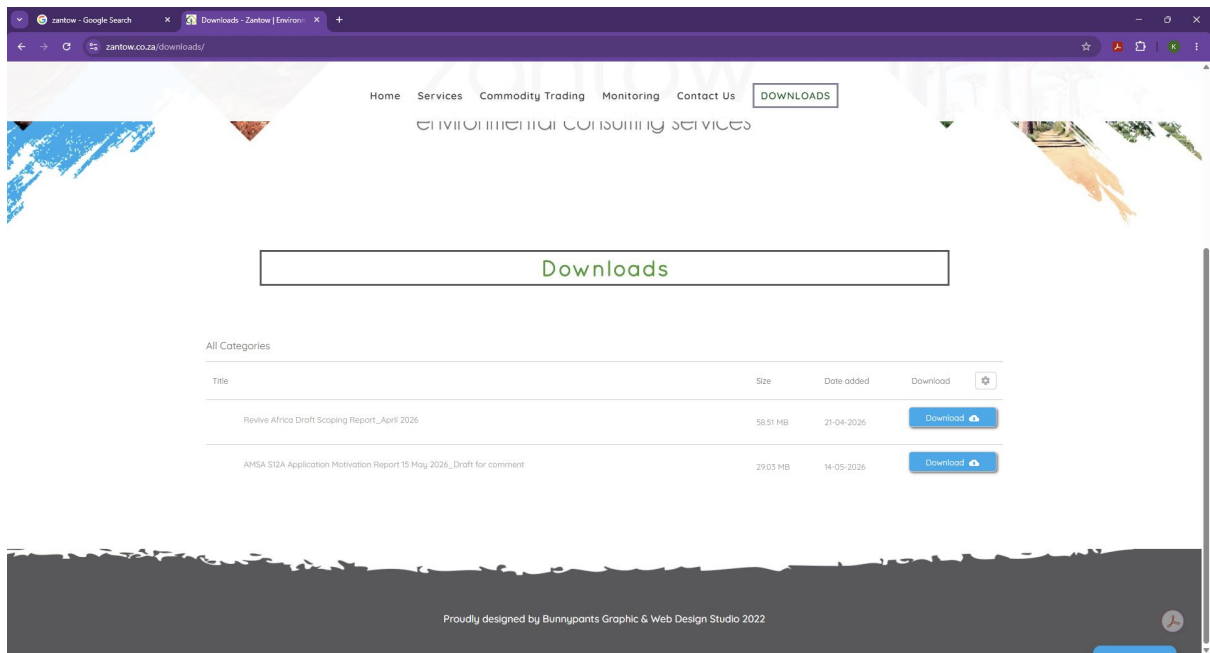


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Annexure D8

Comments received



Centre for Environmental Rights

Advancing Environmental Rights in South Africa

Karien Zantow

Environmental Assessment Practitioner
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Copied to:

Johan Hattingh

Environmental Manager
ArcelorMittal Vanderbijlpark Works
Delfos Boulevard
NW 7
Vanderbijlpark
1900
Email: Johan.Hattingh@arcelormittal.com

15 June 2026

Dear Ms Zantow

OBJECTIONS: ARCELORMITTAL SOUTH AFRICA APPLICATION FOR ALTERNATIVE SO₂ MINIMUM EMISSION STANDARDS LIMIT AT DIRECT REDUCTION KILNS, ARCELORMITTAL VANDERBIJLPARK WORKS, GAUTENG PROVINCE

Introduction

1. We write to you on behalf of our client; Vaal Environmental Justice Alliance (“**VEJA**”). This correspondence serves as our engagement in the public participation process of the application for alternative SO₂ Emission Standards at the direct reduction kilns (“**DR Kilns**”) of ArcelorMittal South Africa (“**AMSA**”).
2. VEJA is a coalition of five environmental organisations with the common goal of establishing the realisation of environmental justice in the Vaal Triangle. VEJA achieves this through educational advocacy, stakeholder engagements and litigation.¹ VEJA is invested in ensuring that industrial activities in the Vaal Triangle do not undermine the fundamental human rights of individuals residing in and around the Vaal Triangle.
3. We hereby submit these objections to Arcelormittal South Africa’s (“**AMSA**”) Draft Section 12A Application for Alternative SO₂ Emission Limits for the direct reduction kilns at its Vanderbijlpark works plant, are based on the Motivation Report and other supporting documents made available on 15 May 2026 and will demonstrate that granting of a further alternative minimum emissions standard to AMSA will adversely impact the environment and the community of the Vaal Triangle Airshed Priority Area (“**VTAPA**”), particularly children and the elderly. We will

¹Vaal Environmental Justice Alliance website, accessed at <https://veja.org.za/about.html>

Cape Town: 1st floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray, Cape Town 7700, South Africa
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further demonstrate that granting the alternative minimum emission standard would be incompatible with air quality laws and regulations.

4. AMSA is a steel producing company, which is a part of the larger ArcelorMittal group worldwide. AMSA operates a steel plant in the Vaal Triangle while also having its headquarters in Vanderbijlpark within the Vaal Triangle.²
5. Our client stands by the objections submitted on 3 April 2025, attached as annexure A, in respect of the now withdrawn application brought by AMSA in 2025, which preceded the Draft Application that AMSA brings now on which we now comment. Those comments should be read with current objections. It is worth noting that none of the concerns raised in our previous objections have been addressed in the reports submitted in support of this application.
6. Our client submits that the application for alternative SO₂ limit minimum emission standard fails to meet the requirements of the National Environmental Management: Air Quality Act³ ("**Air Quality Act**"), the National Framework and the National Ambient Air Quality Standards ("**NAAQS**") and on that basis our client objects to the granting of the application to AMSA. Below we set out the details on which some of our client's objections are based.
7. These comments are structured under the following headings:
 - 6.1. The factual and legal context surrounding AMSA's application;
 - 6.2. The legal framework surrounding the Minimum Emissions Standards;
 - 6.3. The correct interpretation of section 12A of the National Framework;
 - 6.4. The reasons AMSA does not meet the requirements for an alternative SO₂ emission limit; and
 - 6.5. Deficiencies in the Atmospheric Impact Report.
8. This application is yet another application made by AMSA in a string of applications throughout the years. The most recent application, the present and withdrawn applications excluded, was made on 29 March 2019, in respect of its Coke battery 4 – 9 and DR Kilns 3-6. These standards were subsequently granted on 23 March 2020.⁴ Despite the granting of these alternative emission standards, AMSA has made yet another application. In this application, AMSA requests an alternative SO₂ emission standard at DR Kiln 3 – 6. This indicates that at DR Kiln 3-6, since 2020, AMSA has failed to reduce its SO₂ emissions to the alternative standards they were granted in 2020.

BACKGROUND AND LEGAL FRAMEWORK

9. In considering AMSA's application, it is necessary to consider both the factual and legal context within which this application is made.
10. AMSA's Vanderbijlpark Works is based in the Vaal Triangle, an area that is considered a pollution "hotspot", due to the ambient air quality levels falling far below the required NAAQS and the area requiring specific air quality management action to rectify the high levels of pollution. This state of affairs resulted in the Minister declaring

² ArcelorMittal South Africa website, accessed at <https://www.arcelormittalsa.com/Whoweare/Ourcompany.aspx>

³ Act 39 of 2004.

⁴ Zantow Environmental Consulting Services CC, 'Application for Alternative Emission Standards at the DR Kilns in terms of Regulation 12A of Government Notice 893 promulgated in terms of the National Environmental Management: Air Quality Act (No 39 of 2004) ArcelorMittal South Africa Vanderbijlpark Works' accessed at, [ArcelorMittal S12A Application - Dropbox](#)

the Vaal Triangle a national priority area in 2006, which required active steps to improve the ambient air quality.⁵ The declared area has since been formally termed the Vaal Triangle Airshed Priority Area (“**VTAPA**”), as the first declared national priority area in South Africa.⁶

11. The VTAPA is not only home to AMSA, but it is also home to Eksom’s Lethabo power station, which in November of 2024, amongst many other Eskom coal-fired power stations made exemption applications under section 59 of the Air Quality Act due to Eskom’s failure to comply with the minimum emission standards, further exacerbating the high levels of pollution. Lethabo will continue to operate until 2030. A five year exemption for Lethabo means that it will continue to have an impact on the health of residents until April 2030. While AMSA makes this application and a history of non-compliance with applicable, legislated NAAQS and non-enforcement of critical tools to realise air quality standards, undermine the Air Quality Management Plans developed for the VTAPA resulting in poor ambient air quality in the VTAPA which continues to pose a threat to the health of the residents.
12. AMSA has a long and established history of non-compliance with various environmental legislation, including the Air Quality Act. The Department has been aware of AMSA’s non-compliance with emission standards and has repeatedly listed the non-compliance in the National Environmental Compliance and Enforcement Report (“**NECER**”). The NECER 2016-2017 report indicates that there have been non-compliances with the AEL conditions, which include exceedances of particulate matter (“**PM**”), this particularly relevant, in respect of AMSA’s Atmospheric Impact Report (“**AIR**”).
13. AMSA’s Motivation Report, explains that based on investigations its undertaken, *“the DR Kilns are currently unable to achieve the applicable SO₂ emission limit of 500mg/Nm³ under existing operational conditions and available technically feasible mitigation measures. Achieving this standard would require the implementation of large-scale sulphur removal or flue gas desulphurisation technologies associated with exceptionally high capital expenditure, substantial operational costs, and significant technical integration challenges due to the very large flue gas volumes associated with the DR kilns.”* AMSA has had ample time within which to comply with the timeframes, yet legal mechanisms have not been enforced against it. It further explains that *“[a]t this stage, [AMSA] is unable to commit to a definitive compliance date for achieving the new plant SO₂ emissions standard of 500 mg/Nm³ at the DR Kilns. The potential pathway toward future compliance remains dependent on ongoing research, technology assessments, operational investigations, pilot evaluations, and the indemnification of technically feasible and economically sustainable emission reduction solutions applicable to the DR Kiln process.”*
14. While AMSA justifies its request for an alternative emission limit in terms of Paragraph as a financial decision, due to the *“exceptionally high capital expenditure, substantial operational costs, and significant technical integration challenges due to the very large flue gas volumes associated with the DR kilns”*, it is estimated the cost of air pollution to be over R980 billion annually, which is equivalent to 14% of South Africa’s GDP. This cost includes the loss of life, preterm births, and the financial burden on health systems.⁷

The Legal Framework Concerning the Minimum Emissions Standards

Section 24 of the Constitution

15. Section 24 of the Constitution provides that:

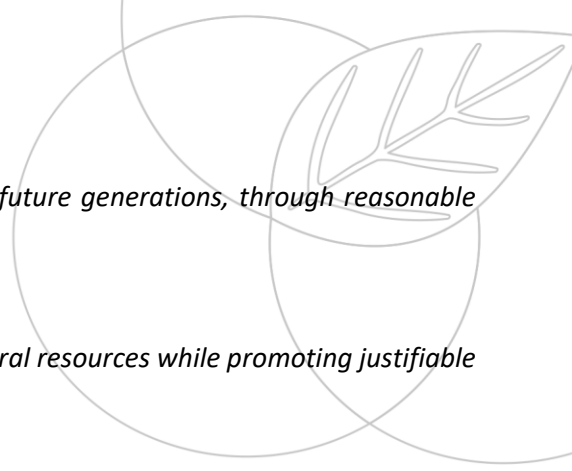
“Everyone has the right:

(a) to an environment that is not harmful to their health or well-being; and

⁵ Section 18 of the Air Quality Act.

⁶ Government Gazette Notice No. 365 of 21 April 2006.

⁷ Dr Jamie Kelly et al ‘Unmasking the toll of fine particle pollution in South Africa’ available at <https://energyandcleanair.org/publication/unmasking-the-toll-of-fine-particle-pollution-in-south-africa/> last accessed on 13 June 2026.

- 
- (b) *to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:*
- (i) *prevent pollution and ecological degradation;*
 - (ii) *promote conservation; and*
 - (iii) *secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”*

16. Section 24(a) entrenches the fundamental, immediately realisable and unqualified right to an environment that is not harmful to health or well-being.⁸
17. In *Vaal River*,⁹ the Constitutional Court endorsed the unqualified reading of section 24(a) as a right which is distinct from the qualified socio-economic rights. The Court held that “[u]nlike socio-economic rights . . . the right to an environment that is not harmful to health or well-being . . . [is] not subject to progressive realisation in accordance with reasonable measures, which are taken within the State’s available resources.” (Emphasis added)
18. The *Vaal River* judgment reinforces the High Court’s judgment in *Deadly Air*,¹⁰ in which Collis J held that section 24(a) is an unqualified right to be free from harmful pollution “**here and now**”. The exposure of deadly air pollution to the residents of the Highveld was declared to be a limitation of constitutional rights, which was not justified under section 36 of the Constitution.¹¹
19. Section 24(b) further imposes a further obligation on the State “to secure the environmental rights by reasonable and legislative and other measures.”¹² Section 24(b) accordingly looks beyond section 24(a), by requiring the State to take reasonable steps to protect the environment even where human health and well-being are not immediately threatened. It acknowledges that environmental protection is not solely about addressing immediate harms but is also intended to exercise long-term custodianship and care for the environment.

Section 28(2) of the Constitution

20. In terms of section 28(2) of the Constitution the right of a child to have their best interests of paramount importance in matters affecting them is a constitutional right that is enjoyed by every child in South Africa. It provides in this regard, that “*a child’s best interests are of paramount importance in every matter concerning the child*”.
21. This right is equally applicable within the context of environmental decisions. This has been confirmed by the High Court which held that environmental decisions need to demonstrate adequate and appropriate consideration of the provisions of section 24 and section 28 of the Constitution.¹³

The National Environmental Management Act

22. The National Environmental Management Act (“**NEMA**”),¹⁴ is South Africa’s framework environmental legislation.

⁸ *Eskom Holdings SOC Ltd v Vaal River Development Association (Pty) Ltd and Others* 2023 (5) BCLR 527 (CC) at para 295; (*Vaal River*); *Trustees for the time being of groundWork Trust and Another v Minister of Environmental Affairs and Others* [2022] ZAGPPHC 208 at paras 37-9 (*Deadly Air*); *HTF Developers (Pty) Ltd v Minister of Environmental Affairs* 2006 (5) SA 512 (T) at para 17.

⁹ *Ibid* at para 295.

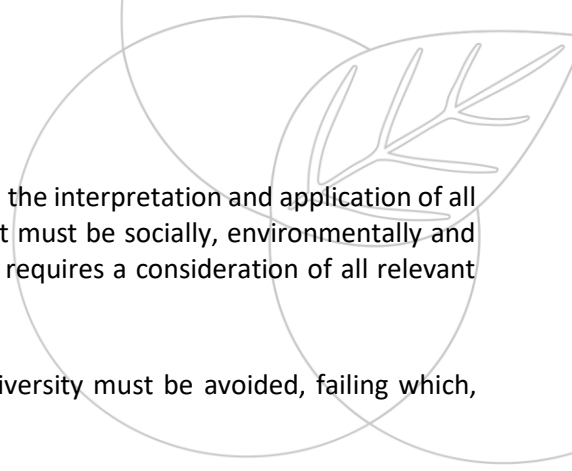
¹⁰ *Deadly Air* at para 156.

¹¹ *Ibid* at para 175.

¹² *HTF Developers* at para 17.

¹³ *African Climate Alliance and Others v the Minister of Mineral Resources and Energy and Others* (56907/2012) [2024] ZAGPPHC 1271 at para 24.

¹⁴ 107 of 1998.



23. Section 2 of NEMA sets out a series of binding principles that must inform the interpretation and application of all environmental legislation. These include the principle that development must be socially, environmentally and economically sustainable.¹⁵ A commitment to sustainable development requires a consideration of all relevant factors, including:

- 21.1. that the disturbance of ecosystems and loss of biological diversity must be avoided, failing which, minimised and remedied;¹⁶
- 21.2. that a risk-averse and cautious approach must be applied, accounting for the limits of current knowledge about the consequences of decisions and actions (known as the '**precautionary principle**');¹⁷ and
- 21.3. that negative impacts on the environment and on the people's environmental rights must be anticipated and prevented, failing which minimised and remedied (known as the '**preventative principle**'); and¹⁸
- 21.4. environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.

24. Another guiding principle requires that the social, economic and environmental impacts of activities must be considered, assessed and evaluated, and decisions must be accordingly appropriate.¹⁹

25. A further principle requires that global and international responsibilities relating to the environment are discharged in the national interest.²⁰

The Air Quality Act

26. The Air Quality Act is subsidiary environmental legislation which was enacted under NEMA with the express aim of addressing air pollution and protecting the section 24 constitutional rights.

27. In its preamble, the Air Quality Act recognises, amongst other things, that the quality of air in many areas of South Africa is not conducive to a healthy environment for the people living in those areas, and that "*minimisation of pollution through vigorous control, cleaner technologies and cleaner production practices is key to ensuring that air quality is improved.*"

28. Section 2 of the Air Quality Act, provides as follows:

"The object of this Act is –

(a) To protect the environment by providing reasonable measures for –

- (i) the protection and enhancement of the quality of air in the Republic;*
- (ii) the prevention of air pollution and ecological degradation; and*
- (iii) securing ecologically sustainable development while promoting justifiable economic and social development; and*

¹⁵ Section 2(3) of NEMA.

¹⁶ Section 2(4)(a)(i) of NEMA.

¹⁷ Section 2(4)(a)(vii) of NEMA.

¹⁸ Section 2(4)(a)(viii) of NEMA.

¹⁹ Section 2(4)(b) of NEMA.

²⁰ Section 2(4)(n) of NEMA.

(b) generally to give effect to section 24(b) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.”

29. Section 3 further imposes a “general duty on the state”, providing, *inter alia*, that “[i]n fulfilling the rights contained in section 24 of the Constitution, the State . . . through the organs of state applying this Act, must seek to protect and enhance the quality of air in the Republic.”

30. The Air Quality Act establishes several mechanisms through which these aims are to be achieved, including the National Framework, NAAQS, atmospheric emissions licences (“AEL”), and the declaration of Priority Areas.

The National Framework

31. Section 7 of the Air Quality Act provides for the creation of a National Framework which sets out binding norms and standards for achieving the objectives of the Act. The current National Framework – the 2017 National Framework – was published on 26 October 2018.

32. Section 7(3) and 7(4) of the Air Quality Act provide that:

“(3) The national framework –

(a) binds all organs of state in all spheres of government; and

(b) may assign and delineate responsibilities for the implementation of this Act amongst

(i) the different spheres of government; and

(ii) different organs of state.

(4) An organ of state must give effect to the national framework when exercising a power or performing a duty in terms of this Act or any other legislation regulating air quality management.”

33. During the mandatory five-year review cycles in 2007, 2012 and 2017, respectively, a number of specific mechanisms and national norms and standards were promulgated in terms of the National Framework and the Air Quality Act. These include NAAQS and List of Activities which “result in atmospheric emissions and which the Minister or MEC reasonably believes have or may have a significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage” (“**the List of Activities**”).

National Ambient Air Quality Standards

34. In terms of section 9 of the Air Quality Act, the Minister must identify substances or mixtures of substances in ambient air which, through ambient concentrations, bioaccumulation, deposition or in any other way, present a threat to health, well-being or the environment. Furthermore, the Minister must, in respect of each of those substances or mixtures of substances, establish national standards for ambient air quality, including the permissible amount or concentration of each such substance or mixture of substances in ambient air.

35. National Standards have been set for eight pollutants: nitrogen dioxide (“**NO₂**”), ozone (“**O₃**”), sulphur dioxide (“**SO₂**”), carbon monoxide (“**CO**”), benzene (“**C₆H₆**”), lead (“**Pb**”), particulate matter – particles with aerodynamic diameter less than ten micron metres (“**PM₁₀**”),²¹ and particulate matter – particles with aerodynamic diameter less than two-and-a-half micron metres (“**PM_{2.5}**”).²²

36. For most pollutants, including PM₁₀, PM_{2.5}, and SO₂, NAAQS are set for both shorter term averaging periods (24 hours or less) and annual periods, because these pollutants can significantly harm human health with short-term

²¹ GN 1210 in GG 32816 of 24 December 2009.

²² GN 486 in GG 35463 of 29 June 2012.

exposures. In other words, even if ambient air is compliant with the annual averaging period standard for a pollutant, it can be non-compliant with the short-term standard.

List of Activities

37. In terms of section 21(1)(a) of the Air Quality Act, the Minister is required to publish, by notice in the Gazette, the List of Activities, specifically which activities require an AEL.
38. Anyone engaging in these listed activities is required to obtain an AEL, issued under Chapter 5 of the Air Quality Act. It is an offence to conduct any of the listed activities without a licence.²³
39. The List of Activities must also establish MES in respect of a substance or mixture of substances resulting from a listed activity identified in the notice. The MES should state the permissible amount, volume, emission rate or concentration of that substance or mixture of substances that may be emitted, and the manner in which measurements of such emissions must be carried out.
40. The purpose of the MES is to set the bare minimum level of regulation for emissions of identified pollutants. Licensing authorities – typically municipalities – may set emission limits that are more stringent than the MES, but **they may not allow emissions above the MES** [emphasis added]. This is designed to ensure a basic, uniform level of regulation, no matter the competence or capacity of the licensing authority.
41. The Minister published the first List of Activities, with associated MES, in March of 2010 following a multi-year, multi-stakeholder process. It required so-called “existing plants”, such as AMSA to comply with one set of MES by April 2015 (existing plant MES), and with stricter MES by April 2020 (new plant MES). Therefore, older plants were given a lead period of 5 years to comply with the more lenient 2015 standard, and a further 5 years to comply with the stricter standard by April 2020.
42. The List of Activities afforded plants an opportunity to apply to the National Air Quality Officer (“NAQO”) for a postponement of compliance with the MES. The NAQO could - with the concurrence of the municipal licensing authority which issues the company’s AEL – extend each deadline by a further five years if certain preconditions are met.
43. This rolling postponement mechanism has been used by largescale polluters including AMSA to achieve what is in effect an exemption from compliance.
44. In October 2018, the then Minister introduced amendments to the List of Activities, along the lines proposed in the 2017 National Framework. The 2018 amendments to the List of Activities also included a new provision, section 12A. Section 12A, makes provision for an existing plant to apply for an alternative emission limit in respect of a particular pollutant or pollutants if a number of preconditions are satisfied.

Priority Areas and Air Quality Management Plans

45. The Air Quality Act also provides for the designation of Priority Areas to ensure focused interventions across municipal and provincial boundaries.
46. Section 18 provides the Minister or relevant provincial MECs with the power to declare priority areas with the aim of taking steps to address the ambient air pollution so that there is compliance with NAAQS. The declaration may be withdrawn if the area is in compliance with NAAQS for at least two years.²⁴

²³ Section 22 of the Air Quality Act.

²⁴ Section 18(5) of the Air Quality Act.

47. The Air Quality Act requires the development of a priority area Air Quality Management Plan (“AQMP”), aimed at co-ordinating air quality management and addressing air quality issues.²⁵ Section 20 further makes provision for regulations to implement and enforce priority area air quality management plans.
48. The first generation AQMP of the VTAPA was published on 28 May 2009 followed by a mid-term review of it in 2013. Over a decade later, the initial AQMP was followed by the second generation AQMP of the VTAP published on June 2020. The Draft baseline assessment report of the second generation AQMP made comparisons of the Air Quality in VTAPA between 2009, 2013 and 2018. This assessment revealed that while there had been overall decreases in PM10 and NOX industrial emissions in VTAPA during this time, there had actually been an increase in SO2 industrial emissions. Furthermore, the results of a VTAPA health study conducted in 2013 – 2014 noted that air pollution in the VTAPA may be affecting child health.²⁶ Based on these and other findings, it has since been reported and concluded that since the establishment of the first generation AQMP of the VTAPA, there has not been a significant improvement in the air quality within this priority area.²⁷ These circumstances are relevant to the current application for alternative standards of SO2 emissions by AMSA.

International law obligations

49. The various obligations outlined above must be understood in light of South Africa’s international law commitments, including the emerging international law right to a safe and healthy environment.²⁸
50. The World Health Organisation has declared air pollution to be one of the world’s greatest public health threats, which is responsible for millions of deaths globally each year. In a 2019 report, the United Nations Special Rapporteur on the Right to a Healthy Environment documented the devastating health effects of air pollution:²⁹
- 50.1 exposure to pollutants in ambient air causes a broad range of health effects including respiratory illnesses and infections, heart disease, stroke, lung cancer and negative birth outcomes such as pre-term birth and low birth weight;
 - 50.2 a growing body of evidence links air pollution to other health problems including cataracts, ear infections, the onset of asthma in children, chronic deficits in lung function, stunting, diabetes, childhood obesity, developmental delays, reduced intelligence and neurological disorders afflicting both children and adults;³⁰
 - 50.3 hundreds of millions of people suffer from illnesses caused by poor air quality. Non-communicable diseases such as stroke, heart disease, chronic obstructive pulmonary disease and cancer have exceeded infectious diseases as the leading cause of death world-wide. Air pollution is one of the five leading risk factors for non-communicable diseases globally;³¹
 - 50.4 air pollution affects everyone, causing widespread violations of the right to breathe clean air. However, the burden of related disease has a disproportionate and unequal effect on certain vulnerable populations. These populations include “women, children, the elderly, minorities,

²⁵ Section 19 of the Air Quality Act.

²⁶ The Second Generation Vaal Triangle Airshed Priority Area Air Quality Management Plan: Draft Baseline Assessment Report, accessed at https://saagis.environment.gov.za/pagesfiles/VTAPA%20SECOND%20GENERATION%20AQMP_DRAFT%20BASELINE%20ASSESSMENT%20REPORT_PUBLIC%20COMMENT.pdf

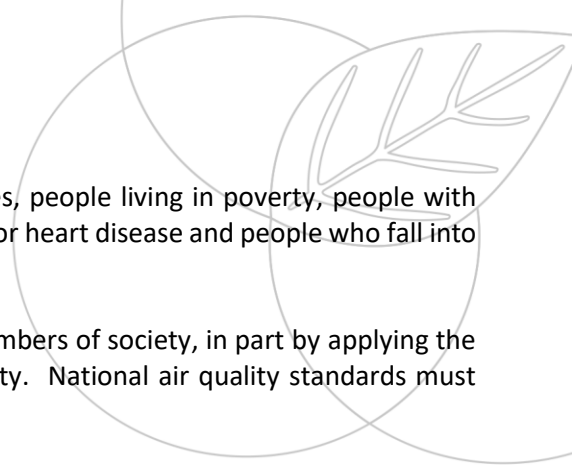
²⁷ Cheledi Tshehla, Caradee Y. Wright ‘15 Years after the National Environmental Management Air Quality Act: Is legislation failing to reduce air pollution in South Africa?’ (2019) accessed at <https://scielo.org.za/pdf/sajs/v115n9-10/13.pdf>

²⁸ *Earthlife Africa v Minister of Environmental Affairs and Others* (2017) 2 All SA 519 (GP).

²⁹ *Issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, Report of the Special Rapporteur, dated 8 January 2019, A/HRC/40/55.

³⁰ Ibid.

³¹ Ibid at pg 6.



indigenous peoples and members of traditional communities, people living in poverty, people with pre-existing health conditions such as respiratory conditions or heart disease and people who fall into several of these categories”;³²

50.5 air quality standards should protect the most vulnerable members of society, in part by applying the precautionary principle and using adequate margins of safety. National air quality standards must consider the best interest of children; and³³

50.6 States must guarantee effective enforcement of their environmental standards against public and private actors. “*Environmental laws, regulations and standards are useless if they are not implemented and enforces.*”³⁴

51. Furthermore, the Special Rapporteur reported the implications for human rights of the environmentally sound management and disposal of hazardous substances and waste, Marcos Orellana, noted that South Africa’s “legislative framework offers a strong basis for the protection of the rights to life, health and a healthy environment.”³⁵ However, this has been undermined by “postponements of or exemptions from compliance” which “have been extended to powerful corporate actors under the guise of economic development, job creation or security.”³⁶

52. The Special Rapporteur emphasised that not only are South Africa’s air quality standards comparatively lenient, but the granting of exemptions and/or extensions also renders those standards of limited value.³⁷

53. Accordingly, the Special Rapporteur offered as his first recommendation under the “Air pollution and just transition” section, the recommendation that South Africa “[p]rohibit rolling postponements or exemptions of compliance with minimum emission standards.”³⁸

54. Air pollution is the most lethal environmental challenge worldwide, causing a staggering 7 million premature deaths per year.³⁹ States have an obligation to respect and protect the rights of people from any real or potential environmental harm.⁴⁰ Children, in particular, are one of the most vulnerable groups to environmental harm, including and particularly air pollution, and are deserving of even greater protection by States.⁴¹

55. In terms of General Comment 26 on the rights of children and the environment, the United Nation’s Committee for the Rights of the Child (“**CRC**”), addressed the adverse effects of environmental degradation on the enjoyment of children’s rights.

56. The General Comment affirms that there is a duty on States to consider the best interests of children in all significant environmental decisions:

³² Ibid.

³³ Ibid at pg 12.

³⁴ Ibid at pg 13.

³⁵ Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Report on South Africa Visit, 31 July to 11 August 2023, 17 July 2024, at para 17.

³⁶ Ibid at para 18.

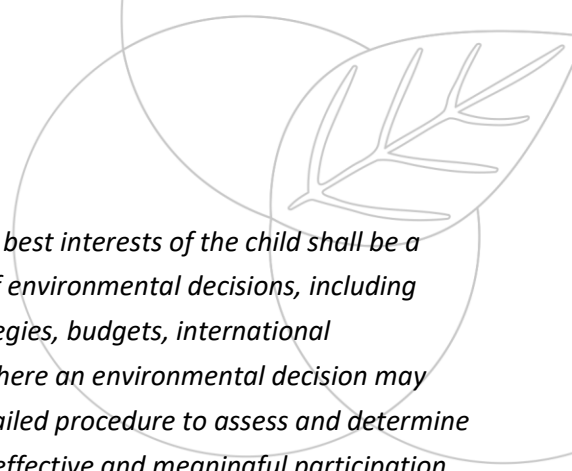
³⁷ Ibid at para 107.

³⁸ Ibid at para C.

³⁹ World Health Organization, Health consequences of air pollution on populations, 25 June 2024, <https://www.who.int/news/item/25-06-2024-what-are-health-consequences-of-air-pollution-on-populations>; World Health Organization, 7 million premature deaths annually linked to air pollution, 25 March 2014, <https://www.who.int/news/item/25-03-2014-7-million-premature-deaths-annually-linked-to-air-pollution>.

⁴⁰ Office of the UN High Commissioner for Human Rights (OHCHR) ‘2016 Day of General Discussion: Children’s Rights and the Environment’ 23 September 2016. Available at <https://www.ohchr.org/en/events/days-general-discussion-dgd/2016/2016-day-general-discussion-childrens-rights-and> (last accessed on 1 April 2025).

⁴¹ Ibid.



“Environmental decisions generally concern children, and the best interests of the child shall be a primary consideration in the adoption and implementation of environmental decisions, including laws, regulations, policies, standards, guidelines, plans, strategies, budgets, international agreements and the provision of development assistance. Where an environmental decision may have a significant impact on children, conducting a more detailed procedure to assess and determine children’s best interests that provides opportunities for their effective and meaningful participation, is appropriate.”

57. To that end, the General Comment emphasises that there is a specific obligation on states to conduct a child’s rights impact assessment where decisions will have significant environmental consequences:

“All proposed environment-related legislation, policies, projects, regulations, budgets and decisions, and those already in force, require vigorous children’s rights impact assessments, in accordance with article 3(1) of the Convention. States should require the assessment, both before and after implementation, of the possible direct and indirect impact on the environment and climate, including the transboundary, cumulative, and both production and consumption effects, on the enjoyment of children’s rights.”

58. In *Deadly Air*, the Court held that “the principle of sustainable development further requires that measures put in place to achieve economic development should not sacrifice the environment and human life and well-being”. AMSA proposes the prioritisation of economic growth at the expense of the environment, human health and human rights.

59. It is vital that in order to give effect to the right to a healthy environment, States fulfil their obligation to regulate. In other words, States must actually create, implement, and enforce laws, policies, regulations, and programmes designed to protect the components of a healthy and safe environment, including clean air. It is our client’s submission that granting AMSA’s alternative SO₂ minimum emission limit is a breach of the State’s obligation. We elaborate on this point further in the section below.

The correct interpretation of the Listed Activities and the MES provisions

60. In terms of section 9 and 10 of the Listed Activities, existing plants are allowed compliance with weaker more lenient limits, called the “existing plant standards” which provide for a higher level of allowed emissions, from 1 April 2015. Such existing plants were then required to comply with “new plant standards” which provide for a stricter standard (lower threshold of allowed emissions) by 1 April 2020. It is worth noting that the more lenient the emission standards are, the more is allowed, and that with stricter standards, less pollution will result.

61. The purpose of the different limits and timeframes is to allow for older plants to have time to make headway and gain ground with compliance with air pollution standards provided for in the Air Quality Act. This can be done through the upgrading of facilities with abatement technologies to meet the stricter air pollution standards over time.

62. All three of the above-mentioned provisions must be read together to establish the most correct interpretation of the allowance provided for by section 12A mentioned above. The wording of section 12A itself makes it clear that the allowance it provides is meant for the eventual but merely delayed compliance with the Minimum Emission Standards established for new plants. On proper reading of section 12A, in line with the Constitution, the Air

Quality Act and the National Framework, this provision was not intended to be an avenue for permanent non-compliance with the law.

63. Interpreting section 12A to allow for alternative limits against the existing plant standards and for any period beyond 31 March 2025, would be a retrogressive application of the law. This interpretation would allow for any emissions, for any length of time, which is essentially, an exemption under section 59(1), and section 9(c) of the Air Quality Act which is impermissible. Weakening emissions in this way would mean that polluters would not have to comply with the MES, and NAAQS would never be complied with.
64. To allow for polluters to be able to apply for alternative limits that operate in perpetuity, without the requisite timeframes for compliance; or to allow for alternative limits weaker than the old standards that were meant to be in compliance already in 2015, would make a mockery of not only the purpose of the List of Activities, but the entire air quality management legislative framework, and in turn, NEMA and the Constitution. This would be a blatant disregard of the purpose of the legislative framework.
65. Furthermore, it is worth noting that the section under which AMSA request an alternative emission limit is currently being challenged in ongoing litigation brought against the Minister of Forestry, Fisheries and the Environment, the National Air Quality Officer and AMSA.⁴² Our client submits that this application should not be granted pending a ruling by a Court on the correct interpretation and a declaration on the constitutionality on the section. The granting of the application would render the relief our client seeks in this application moot.

AMSA does not meet the requirements for an alternative SO₂ emission limit

66. In terms of section of section 12A(c) *“the National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if: (i) there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or (ii) the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard.”*
67. The annual State of the Air Reports, compiled by the NAQO on behalf of the Department, have repeatedly highlighted the risks. In the 2020 State of the Air Report, the NAQO acknowledged that: “PM is still the greatest national cause of concern in terms of air quality due to numerous pollution sources, and climatic conditions are also a major factor.” . . . [c]ontinued and increased national and provincial and local action is required in order to bring particulate concentrations down to acceptable levels. . . . “[m]any South Africans are breathing air that is harmful to their health and well-being especially in the priority areas.”
68. The State of the Air Report presented by the Department of Forestry, Fisheries and the Environment at the 2022 Air Quality Lekgotla indicates that there is non-compliance with NAAQS for PM₁₀ and PM_{2.5} which can be converted from SO₂. This indicated that there is no material compliance with the NAAQS in the VTAPA. Ambient air in the area should be in compliance with the NAAQS in order to grant alternative limits. AMSA’s AIR considers the level of compliance with NAAQS but fails to consider the conversion of SO₂ to PM_{2.5} which is currently not in compliance with NAAQS.
69. In addition, the 2024 State of the Air Report and Air Quality Management Highlights, recommends as proposed interventions, introducing stricter national/provincial MES and/or trading schemes beyond 2025.
70. Furthermore, the deficiencies in the AIR result in the report not providing an accurate reflection of the increased health risk that will be occasioned by the granting of the alternative SO₂ limit. It is for these reasons that our client

⁴² *Vaal Environmental Justice Alliance and Another v Minister of Forestry, Fisheries and the Environment and Others* (Case No. 2023/079658).

submits that the requirements for an alternative SO₂ limit have not been satisfied and the alternative limit should accordingly be denied. The deficiencies in the AIR are elaborated upon below.

Deficiencies in the Atmospheric Impact Report

71. Expert reviews of the AIR identify significant deficiencies. The deficiencies are detailed in the section below.

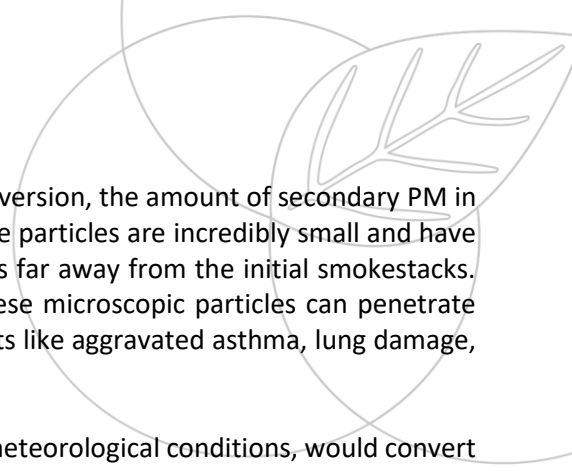
Atmospheric Impact Report

I. Failure to comply with the Minimum Emission Standard (MES) of 500 mg/Nm³ and instead operating at the requested alternative limit of 1,500 mg/Nm³ would result in an additional 1,561 tons per year of SO₂ emissions

72. AMSA is currently seeking permission to operate the kilns at its Vanderbijlpark steel plant under a significantly more lenient SO₂ emission limit than standard regulations permit. By law, the strict MES for these types of plants is set at 500 mg/Nm³. However, it argues that this target is simply unachievable for its direct reduction iron plant. As a result, they have applied for an alternative limit that would allow them to legally operate at 1,500 mg/Nm³, which is three times higher than the strict legal standard.
73. The AIR models exactly how much total SO₂ would be released over the course of a year under both the strict and lenient MES. The AIR calculates a strict compliance model under "Scenario 5", which shows that if the plant successfully met the 500 mg/Nm³ standard, it would release a total of 7,572 tons of SO₂ into the air annually. Conversely, the AIR also models under "Scenario 3" the emissions if the government grants its request to operate at the higher 1,500 mg/Nm³ limit. In that case, the plant's expected annual emissions would jump to 9,133 tons. Both models are directly comparable because they assume the exact same operational conditions, such as running the kilns 50% of the time alongside a single operational coke oven.
74. The two scenarios compared side-by-side, clearly demonstrate the environmental cost of relaxing the rules. The difference between the requested limit's emissions of 9,133 tons and the strict compliance emissions of 7,572 tons is exactly 1,561 tons. Simply put, if AMSA is exempted from meeting the national 500 mg/Nm³ standard and allowed to operate at 1,500 mg/Nm³, the facility will release an extra 1,561 tons of SO₂ pollution into the surrounding atmosphere every single year.

II. Between 10-30% of AMSA's SO₂ emissions would convert in the atmosphere into particulate matter (PM)

75. When SO₂ is released into the air—mostly from human activities like burning coal at power plants and industrial sites—it does not remain purely as a gas. Through complex chemical reactions, SO₂ transforms in the atmosphere into fine liquid or solid particles known as sulphate aerosols. This transformation process, often referred to as a "gas-to-particle conversion", is a primary way that secondary PM forms in our air. Crucially, the rate at which this conversion happens is not fixed, but is deeply influenced by the weather.
76. Meteorological conditions, such as temperature, sunlight, and humidity, dictate exactly how much SO₂ converts into PM. For example, during sunny days and summer months, higher temperatures and abundant solar radiation increase the presence of certain reactive chemicals (like hydroxyl radicals) in the air. These chemicals rapidly oxidize the SO₂ gas, accelerating its conversion into solid sulphate particles. Because of this sunlight-driven reaction, the conversion rate naturally peaks around midday and drops significantly at night. Moisture is another powerful weather factor; during wet seasons, cloudy weather, or foggy conditions, SO₂ can be absorbed into water droplets and rapidly converted into PM through reactions occurring inside the clouds themselves.

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77. Ultimately, because changing weather patterns control this chemical conversion, the amount of secondary PM in our environment fluctuates constantly. Once formed, these fine sulphate particles are incredibly small and have long lifespans, meaning they can be carried by winds over vast distances far away from the initial smokestacks. This weather-driven conversion is a major public health concern, as these microscopic particles can penetrate deep into the human respiratory system, leading to severe health impacts like aggravated asthma, lung damage, and cardiovascular disease.
78. A substantial portion of SO₂ emissions, between 10-30%, depending on meteorological conditions, would convert in the atmosphere into PM.⁴³ This seasonal variability is driven by the interplay between stable winter inversion layers, which trap primary gaseous precursors, and high summertime solar radiation that drives photochemical oxidation.⁴⁴

III. Vanderbijlpark is situated within the Highveld where exposure to PM causes substantial premature mortality

79. The South African Highveld comprises the high-altitude interior plateau of northeastern South Africa, encompassing much of Mpumalanga, Gauteng, and the Free State, where numerous coal-fired power stations and industrial complexes are concentrated. AMSA's Vanderbijlpark plant sits within the South African Highveld.
80. Because of its numerous coal-fired power stations and industrial complexes, the South African Highveld suffers from among the highest levels of pollution in the world. Several recent studies have found that thousands of individuals in the South African Highveld die prematurely because of levels of PM that fail to comply with health-based ambient air quality standards.⁴⁵

IV. Levels of PM around AMSA's facility fail to comply with NAAQS

81. The air surrounding the AMSA is heavily polluted with PM, which includes both coarse dust and fine, inhalable particles. Data collected between 2021 and 2025 from five local monitoring stations shows that the concentration of these particles regularly exceeds South Africa's legal health limits and WHO ambient air quality guideline values. See the following data from Tables 5-5 and 5-6 of the AIR.

⁴³ Gray, H. A., Solutions, G. S., & San Rafael, C. (2019). Air quality impacts and health effects due to large stationary source emissions in and around South Africa's Mpumalanga Highveld Priority Area (HPA). *San Rafael, CA USA: Gray Sky Solutions*. Wernecke, B., Langerman, K. E., Garland, R. M., & Feig, G. (2022). Ambient air pollution on the Highveld: An airshed at a watershed moment?. *Clean Air Journal*, 32(1), 1-3.

⁴⁴ Myllyvirta, L. (2019) "Air quality and health impacts of doubling the South African standards for SO₂ emissions from power plants." https://cer.org.za/wp-content/uploads/2019/07/Annexure-3_Lauri-Myllyvirta_Report_July-2019.pdf

⁴⁵ Opiyo, S. B., Burger, R., Balaka, M. N., & Piketh, S. (2026). Air pollution and cardio-respiratory mortality in Limpopo, South Africa (2011–2020): evidence on population and seasonal vulnerability. *Air Quality, Atmosphere & Health*, 19(6), 127; Altieri, K. E., & Keen, S. L. (2019). Public health benefits of reducing exposure to ambient fine particulate matter in South Africa. *Science of the Total Environment*, 684, 610-620.

Table 5-5: Measured PM₁₀ concentrations

PM ₁₀	Year	Data Availability	Daily Concentrations		Annual Average
Station			Highest	Exceedances of NAAQ Limit	
Vanderbijlpark	2021	77%	206	119	72
	2022	78%	217	95	63
	2023	61%	455	69	84
	2024	92%	280	145	76
	2025	54%	118	7	37
North West Campus	2021	98%	237	48	41
	2022	82%	88	5	33
	2023	99%	124	12	31
	2024	89%	55	0	7
	2025	14%	143	23	67
Sharpeville	2021	15%	34	0	17
	2022	73%	193	69	53
	2023	56%	205	65	66
	2024	89%	192	150	80
	2025	27%	116	12	43
Bongani Mabaso Eco Park	2021	96%	167	66	47
	2022	64%	114	17	37
	2023	79%	164	36	44
	2024	71%	203	62	57
	2025	24%	44	0	24
Sebokeng	2021	67%	308	87	65
	2022	5%	67	0	46
	2023	53%	161	47	56
	2024	87%	147	60	51
	2025	100%	127	52	45

Table 5-6: Measured PM_{2.5} concentrations

PM _{2.5} Station	Year	Data Availability	Daily Concentrations		Annual Average
			Highest	Exceedances of NAAQ Limit	
Vanderbijlpark	2021	77%	119	84	33
	2022	78%	114	67	30
	2023	61%	191	51	32
	2024	92%	136	94	32
	2025	54%	51	2	13
North West Campus	2021	98%	66	49	22
	2022	82%	57	16	21
	2023	99%	64	22	19
	2024	89%	25	0	4
	2025	14%	116	27	50
Sharpeville	2021	14%	4	0	2
	2022	76%	117	53	20
	2023	58%	138	50	35
	2024	90%	122	131	40
	2025	27%	69	15	24
Bongani Mabeaso Eco Park	2021	96%	91	57	24
	2022	64%	63	16	18
	2023	79%	94	37	22
	2024	71%	98	45	26
	2025	24%	23	0	12
Sebokeng	2021	64%	84	51	30
	2022	14%	50	4	26
	2023	52%	82	37	29
	2024	87%	88	39	25
	2025	99%	72	36	21

V. AMSA ignores the fact that its emissions of SO₂ convert in the atmosphere into PM

82. AMSA's AIR ignores the secondary formation of PM by explicitly excluding "chemical transformations" from its computer modeling. Even though the facility releases thousands of tons of SO₂ into the air each year, the AIR's dispersion model treats SO₂ strictly as a gas and omits the natural atmospheric process where SO₂ reacts to form fine solid sulfate particles over time. Because this chemical transformation feature is intentionally left out of the simulation, the AIR's ultimate conclusion—that the plant's specific PM₁₀ and PM_{2.5} impacts comply with NAAQS—is based solely on the primary dust and soot directly released by the facility, completely failing to account for the additional fine particulate pollution generated indirectly by its SO₂ emissions.
83. It is worth noting, that AMSA operates facilities in the United States and Canada that recognise and evaluate secondary PM formation from SO₂ and NO_x emissions. Accordingly, AMSA cannot contend that the consideration of secondary PM formation is scientifically novel or beyond the capabilities of a multinational steel producer.
84. In its Community Health Risk Assessment for Exposure to Sulfur Dioxide dated 29 April 2026, AMSA puts forward the following:

"5.4 SO₂ conversion in air

"Conversion of SO₂ to sulfate particulates through atmospheric reactions is a slow process and has been disregarded in the exposure and risk calculations in this document. The reported atmospheric half-life of SO₂ to sulfates varies between

6 hours (Finlayson-Pitts and Pitts 1986, Brimblecombe et al. 1996, and Porter et al. 2002) and 10 days (Calvert and Stockwell 1984).”

85. Disregarding the health impacts of the conversion of SO₂ to sulfate particulates through atmospheric reactions is demonstrably negligent. Secondary sulfate aerosols formed from sulfur SO₂ emissions typically remain suspended in the atmosphere for several days, commonly 2–10 days, permitting long-range transport and allowing SO₂ emitted to contribute to PM_{2.5} concentrations over large regions before deposition occurs.

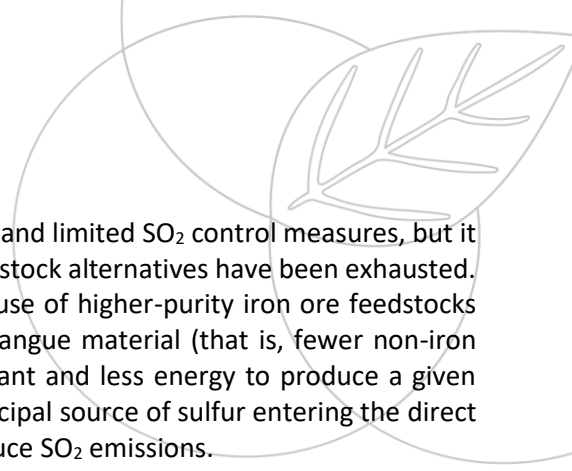
VI. AMSA’s emissions of SO₂ are likely associated with significant excess premature mortality in the Highveld because of the conversion of these emissions into PM

86. AMSA’s Vanderbijlpark facility releases massive amounts of SO₂ gas into the air every year. While AMSA’s own environmental assessments treat this pollution strictly as a gas, atmospheric science demonstrates that once SO₂ enters the air, it reacts with other chemicals and moisture to form solid, microscopic particles known as secondary sulfates, i.e. PM_{2.5}.
87. In the Highveld region, this chemical transformation is a major driver of deadly air pollution. Independent research on large industrial polluters in the area reveals that the vast majority of the PM_{2.5} impacts caused by these facilities actually come from their SO₂ emissions converting into secondary sulfates as they travel downwind, rather than from the direct dust released from their smokestacks.⁴⁶
88. This indirect particulate pollution is highly dangerous to human health. When people breathe in these fine sulfate particles, they face a significantly higher risk of severe medical conditions, including strokes, heart disease, chronic obstructive pulmonary disease, lung cancer, and lower respiratory infections. Economic and health assessments of air pollution in the Highveld consistently show that reducing industrial SO₂ emissions—and thereby preventing the formation of these secondary particles—is the most crucial step for reducing premature mortality in the region.
89. Furthermore, monitoring data confirms that the air surrounding AMSA’s facility already consistently fails to meet legal safety standards for PM₁₀ and PM_{2.5}. Because the region’s air is already heavily saturated with dangerous levels of PM, adding thousands of tons of SO₂ that will inevitably convert into even more fine PM_{2.5} directly compounds an already severe public health crisis. By generating such massive quantities of SO₂ that transform into inhalable particles, AMSA’s operations are likely contributing to significant and preventable premature mortality in the surrounding communities.

VII. AMSA’s claim that it cannot meet the MES of 500 mg/Nm³ is driven primarily by cost considerations

90. AMSA’s application does not demonstrate that compliance with the applicable MES of 500 mg/Nm³ for SO₂ is technically impossible. Rather, the application repeatedly states that achieving the standard is not considered “**technically and economically sustainable**” under current circumstances and would require substantial capital expenditure and operating costs. The report emphasises AMSA’s financial constraints and the potential effects on the long-term viability of the Vanderbijlpark Works, while acknowledging that compliance technologies and further investigations remain under consideration.
91. Indeed, AMSA acknowledges that a scenario in which the direct reduction kilns comply with the 500 mg/Nm³ standard would result in substantially lower overall SO₂ emissions, and it anticipates that such compliance may ultimately be achieved following further research and technology development. AMSA’s request for a ten-year alternative emission limit is therefore premised not on the impossibility of meeting the standard, but rather on the contention that the required investments are presently considered too costly or economically burdensome.

⁴⁶ Ibid.

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92. The AIR also focuses primarily on trials involving lower-sulfur coal blends and limited SO₂ control measures, but it does not demonstrate that all reasonable process modifications and feedstock alternatives have been exhausted. In particular, the application does not appear to evaluate whether the use of higher-purity iron ore feedstocks could reduce SO₂ emissions. High-grade iron ore pellets contain less gangue material (that is, fewer non-iron impurities such as silica and alumina) and generally require less reductant and less energy to produce a given quantity of sponge iron. Because coal is both the reductant and the principal source of sulfur entering the direct reduction process, reducing coal consumption would be expected to reduce SO₂ emissions.
93. The increasing availability of high-grade iron ore suitable for direct reduction is widely recognised as an important development in the global steel industry. Numerous producers around the world are utilizing high-purity pellets to improve process efficiency, reduce fuel consumption, and facilitate lower-emission ironmaking technologies. AMSA's application does not demonstrate that such feedstocks are unavailable or technically unsuitable for use at the Vanderbijlpark Works.
94. Accordingly, the evidence presented in the application suggests that AMSA's inability to achieve the 500 mg/Nm³ MES is driven primarily by economic considerations and its unwillingness to incur the costs associated with additional control technologies, operational changes, or improved feedstocks, rather than by any showing that compliance with the standard is technically impossible.
95. Due to the fact that AMSA's emissions of SO₂ are likely associated with significant excess premature mortality in the VTAPA, it is essential to compare this mortality cost to the amount of money AMSA might save by avoiding compliance with the 500 mg/Nm³ standard for AMSA's direct reduction kilns.
96. This would further degrade air quality in the VTAPA, where PM₁₀ and PM_{2.5} levels already exceed NAAQS. The AIR does not adequately assess the impact of these emissions on PM levels, as it relies on the AERMOD modelling system, which does not account for SO₂ transformation into sulfate aerosols. More advanced models such as CMAQ or CAMx should have been used to accurately evaluate secondary PM_{2.5} formation.
97. In sum, granting the requested alternative SO₂ emission limits would result in a significant increase of over 1561 additional tons of SO₂ emissions per year. A substantial portion of these SO₂ emissions, between 10 % to 30%, depending on meteorological conditions, would convert in the atmosphere into PM. Vanderbijlpark is situated within the VTAPA, both geographically and in terms of air quality management, where exposure to PM causes substantial premature deaths. Ambient air quality monitoring data in the AIR demonstrates that levels of PM fail to comply with NAAQS. The AIR and other documents put forward by AMSA ignore the fact that its emissions of SO₂ convert in the atmosphere into PM. If AMSA had not ignored the fact that its emissions of SO₂ convert in the atmosphere into PM, then it would have found that such emissions would be associated with significant excess premature deaths. The justification for the alternative limits is flawed, as the AIR does not demonstrate that relaxing the 500 mg/Nm³ standard is necessary or that it would lead to compliance with air quality regulations. Given the already critical pollution levels in the VTAPA, granting these alternative limits would likely exacerbate non-compliance rather than improve conditions.

Conclusion

98. It is our client's submission that on a correct interpretation an alternative emission limit in terms of section 12A is not permissible in law. Furthermore, pending the finalisation of ongoing litigation regarding section 12A, this application should not be granted. Even, if it is found that they are permissible, AMSA does not meet the requirements for the granting of an alternative SO₂ limit for reasons discussed above and accordingly its application should be refused.

Yours faithfully

CENTRE FOR ENVIRONMENTAL RIGHTS

per:

: 

Michelle Sithole

Attorney

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Centre for Environmental Rights

Advancing Environmental Rights in South Africa

Annexure A

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3 April 2025

Dear Sirs/Mesdames

OBJECTIONS: ARCELORMITTAL SOUTH AFRICA APPLICATION FOR ALTERNATIVE SO₂ MINIMUM EMISSION STANDARDS LIMIT AT DIRECT REDUCTION KILNS 1-6

Introduction

1. We write to you on behalf of our clients; groundWork and Vaal Environmental Justice Alliance (“**VEJA**”). This correspondence serves as our engagement in the public participation process of the application for alternative SO₂ Emission Standards at the direct reduction kilns (“**DR Kilns**”) of ArcelorMittal South Africa (“**AMSA**”).
2. Our objections are based on the Motivation Report and other attached documents made available on 26 February 2025 and will demonstrate that granting of a further alternative minimum emissions standard to AMSA will adversely impact the environment and the community of the VTAPA, particularly children. We will further demonstrate that granting the alternative minimum emission standard would be incompatible with air quality laws and regulations.
3. VEJA is a coalition of five environmental organisations with the common goal of establishing the realisation of environmental justice in the Vaal Triangle. VEJA achieves this through educational advocacy, stakeholder engagements and litigation.¹ groundWork is a non-profit organisation that focuses its work primarily on climate change action and environmental justice guided by section 24 of Constitution. groundWork prioritises vulnerable

¹Vaal Environmental Justice Alliance website, accessed at <https://veja.org.za/about.html>

community empowerment through various campaigns and advocacy work.² VEJA and groundWork alike, are invested in ensuring that industrial activities in the Vaal Triangle do not undermine the fundamental human rights of individuals residing in and around the Vaal Triangle.

4. AMSA is a steel producing company, which is a part of the larger worldwide ArcelorMittal group. AMSA operates a steel plant in the Vaal Triangle while also having its headquarters in Vanderbijlpark within the Vaal Triangle.³
5. Our clients submit that the application for alternative SO₂ limit minimum emission standard fails to meet the requirements of the National Environmental Management: Air Quality Act⁴ ("**Air Quality Act**") , the National Framework and the National Ambient Air Quality Standards ("**NAAQS**") and on that basis our clients object to the granting of the application to AMSA. Below we set out the detail on which some of our clients' objections are based.
6. The following sections will be addressed in this objection, namely:
 - 6.1. The factual and legal context surrounding AMSA's application;
 - 6.2. The legal framework surrounding the Minimum Emissions Standards;
 - 6.3. The correct interpretation of paragraph 12A of the National Framework;
 - 6.4. The reasons AMSA does not meet the requirements for an alternative SO₂ emission limit; and
 - 6.5. Deficiencies in the Health Risk Assessment and the Atmospheric Impact Report.
7. This application is one of many applications made by AMSA throughout the years. The most recent application, the present application excluded, was made on 29 March 2019, in respect of it's Coke battery 4 – 9 and DR Kilns 3-6. These standards were subsequently granted on 23 March 2020.⁵ Despite the granting of these alternative emission standards, AMSA has made yet another application. In this application, AMSA requests an alternative SO₂ emission standard at DR Kiln 1 – 6. This indicates that at DR Kiln 3-6, since 2020, AMSA has failed to reduce its SO₂ emissions to the alternative standards they were granted in 2020.

BACKGROUND AND LEGAL FRAMEWORK

8. In considering AMSA's application, it is necessary to consider both the factual and legal context within which this application is made.
9. AMSA's Vanderbijlpark Works is based in the Vaal Triangle, an area that is considered a pollution "hotspot", due to the ambient air quality levels falling far below the required NAAQS and the area requiring specific air quality management action to rectify the high levels of pollution. This state of affairs resulted in the Minister declaring the Vaal Triangle a national priority area in 2006, which required active steps to improve the ambient air quality.⁶ The declared area has since been formally termed the Vaal Triangle Airshed Priority Area ("**VTAPA**"), as the first declared national priority area in South Africa.⁷

² groundWork website, accessed at <https://groundwork.org.za/about-us/>

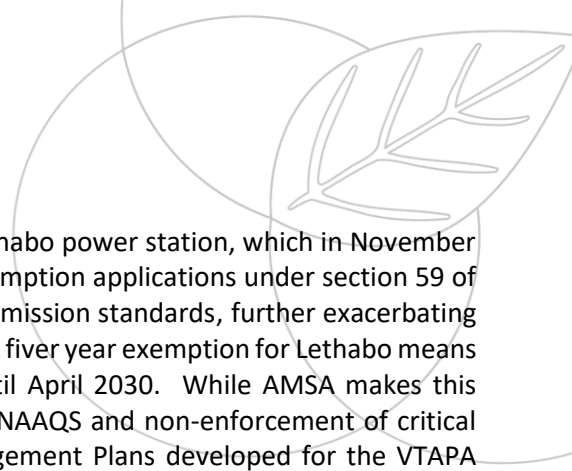
³ ArcelorMittal South Africa website, accessed at <https://www.arcelormittalsa.com/Whoweare/Ourcompany.aspx>

⁴ Act 39 of 2004.

⁵ Zantow Environmental Consulting Services CC, 'Application for Alternative Emission Standards at the DR Kilns in terms of Regulation 12A of Government Notice 893 promulgated in terms of the National Environmental Management: Air Quality Act (No 39 of 2004) ArcelorMittal South Africa Vanderbijlpark Works' accessed at, [ArcelorMittal S12A Application - Dropbox](#)

⁶ Section 18 of the Air Quality Act.

⁷ Government Gazette Notice No. 365 of 21 April 2006.

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10. The VTAPA is not only home to AMSA, but it is also home to Eskom's Lethabo power station, which in November of 2024, amongst many other Eskom coal-fired power stations made exemption applications under section 59 of the Air Quality Act due to Eskom's failure to comply with the minimum emission standards, further exacerbating the high levels of pollution. Lethabo will continue to operate until 2030. A five year exemption for Lethabo means that it will continue to have an impact on the health of residents. until April 2030. While AMSA makes this application and a history of non-compliance with applicable, legislated NAAQS and non-enforcement of critical tools to realise air quality standards, undermine the Air Quality Management Plans developed for the VTAPA resulting in poor ambient air quality in the VTAPA which continues to pose a threat to the health of the residents.
 11. AMSA has a long and established history of non-compliance with various environmental legislation, including the Air Quality Act. The Department has been aware of AMSA's non-compliance with emission standards and has repeatedly listed the non-compliance in the National Environmental Compliance and Enforcement Report ("NECER"). The NECER 2016-2017 report indicates that there have been non-compliances with the AEL conditions, which include exceedances of particulate matter ("PM"), this particularly relevant, in respect of AMSA's Health Risk Assessment Report, as well as its Atmospheric Impact Report.
 12. AMSA's Motivation Report, explains that previous methods employed to reduce SO₂ emissions, namely, the use of cleaner low Sulphur coal and the carbon capture and utilization concept technology have proven unsuccessful.⁸ AMSA proposes to adopt a decarbonization strategy – which on its own admission will never be able to comply with the SO₂ new plant standard emission limit of 500 mg/Nm³ while remaining economically viable. AMSA has had ample time within which to comply with the timeframes, yet legal mechanisms have not been enforced against it.

The Legal Framework Concerning the Minimum Emissions Standards

Section 24 of the Constitution

13. Section 24 of the Constitution provides that:

"Everyone has the right:

(a) to an environment that is not harmful to their health or well-being; and

(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:

(i) prevent pollution and ecological degradation;

(ii) promote conservation; and

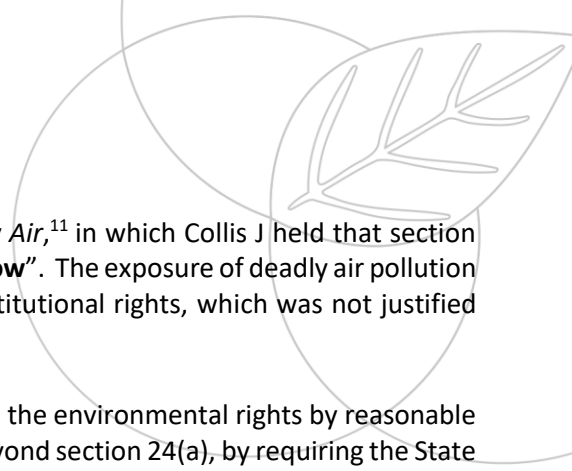
(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."

14. Section 24(a) entrenches the fundamental, immediately realisable and unqualified right to an environment that is not harmful to health or well-being.⁹
15. In *Vaal River*,¹⁰ the Constitutional Court endorsed the unqualified reading of section 24(a) as a right which is distinct from the qualified socio-economic rights. The Court held that "[u]nlike socio-economic rights . . . the right to an environment that is not harmful to health or well-being . . . [is] not subject to progressive realisation in accordance with reasonable measures, which are taken within the State's available resources." (Emphasis added)

⁸ Ibid

⁹ *Eskom Holdings SOC Ltd v Vaal River Development Association (Pty) Ltd and Others* 2023 (5) BCLR 527 (CC) at para 295; (*Vaal River*); *Trustees for the time being of groundWork Trust and Another v Minister of Environmental Affairs and Others* [2022] ZAGPPHC 208 at paras 37-9 (*Deadly Air*); *HTF Developers (Pty) Ltd v Minister of Environmental Affairs* 2006 (5) SA 512 (T) at para 17.

¹⁰ Ibid at para 295.

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16. The *Vaal River* judgment reinforces the High Court’s judgment in *Deadly Air*,¹¹ in which Collis J held that section 24(a) is an unqualified right to be free from harmful pollution “**here and now**”. The exposure of deadly air pollution to the residents of the Highveld was declared to be a limitation of constitutional rights, which was not justified under section 36 of the Constitution.¹²
17. Section 24(b) further imposes a further obligation on the State “to secure the environmental rights by reasonable and legislative and other measures.”¹³ Section 24(b) accordingly looks beyond section 24(a), by requiring the State to take reasonable steps to protect the environment even where human health and well-being are not immediately threatened. It acknowledges that environmental protection is not solely about addressing immediate harms, but is also intended to exercise long-term custodianship and care for the environment.

Section 28(2) of the Constitution

18. In terms of section 28(2) of the Constitution the right of a child to have their best interests of paramount importance in matters affecting them is a constitutional right that is enjoyed by every child in South Africa. It provides in this regard, that “*a child’s best interests are of paramount importance in every matter concerning the child*”.
19. This right is equally applicable within the context of environmental decisions. This has been confirmed by the High Court which held that environmental decisions need to demonstrate adequate and appropriate consideration of the provisions of section 24 and section 28 of the Constitution.¹⁴

The National Environmental Management Act

20. The National Environmental Management Act (“**NEMA**”),¹⁵ is South Africa’s framework environmental legislation.
21. Section 2 of NEMA sets out a series of binding principles that must inform the interpretation and application of all environmental legislation. These include the principle that development must be socially, environmentally and economically sustainable.¹⁶ A commitment to sustainable development requires a consideration of all relevant factors, including:
- 21.1. that the disturbance of ecosystems and loss of biological diversity must be avoided, failing which, minimised and remedied;¹⁷
 - 21.2. that a risk-averse and cautious approach must be applied, accounting for the limits of current knowledge about the consequences of decisions and actions (known as the ‘precautionary principle’);¹⁸ and
 - 21.3. that negative impacts on the environment and people’s environmental rights must be anticipated and prevented, failing which minimised and remedied (known as the ‘preventative principle’).¹⁹

¹¹ *Deadly Air* at para 156.

¹² *Ibid* at para 175.

¹³ *HTF Developers* at para 17.

¹⁴ *African Climate Alliance and Others v the Minister of Mineral Resources and Energy and Others* (56907/2012) [2024] ZAGPPHC 1271 at para 24.

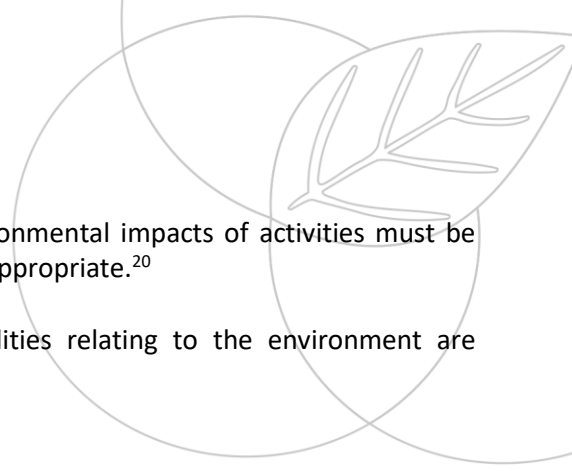
¹⁵ 107 of 1998.

¹⁶ Section 2(3) of NEMA.

¹⁷ Section 2(4)(a)(i) of NEMA.

¹⁸ Section 2(4)(a)(vii) of NEMA.

¹⁹ Section 2(4)(a)(viii) of NEMA.

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22. Another guiding principle requires that the social, economic and environmental impacts of activities must be considered, assessed and evaluated, and decisions must be accordingly appropriate.²⁰
23. A further principle requires that global and international responsibilities relating to the environment are discharged in the national interest.²¹

The Air Quality Act

24. The Air Quality Act is subsidiary environmental legislation which was enacted under NEMA with the express aim of addressing air pollution and protecting the section 24 constitutional rights.
25. In its preamble, the Air Quality Act recognises, amongst other things, that the quality of air in many areas of South Africa is not conducive to a healthy environment for the people living in those areas, and that *“minimisation of pollution through vigorous control, cleaner technologies and cleaner production practices is key to ensuring that air quality is improved.”*
26. Section 2 of the Air Quality Act, provides as follows:

“The object of this Act is –

(a) To protect the environment by providing reasonable measures for –

- (i) the protection and enhancement of the quality of air in the Republic;*
- (ii) the prevention of air pollution and ecological degradation; and*
- (iii) securing ecologically sustainable development while promoting justifiable economic and social development; and*

(b) generally to give effect to section 24(b) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.”

27. Section 3 further imposes a “general duty on the state”, providing, *inter alia*, that “[i]n fulfilling the rights contained in section 24 of the Constitution, the State . . . through the organs of state applying this Act, must seek to protect and enhance the quality of air in the Republic.”
28. The Air Quality Act establishes several mechanisms through which these aims are to be achieved, including the National Framework, NAAQS, atmospheric emissions licences (“**AEL**”), and the declaration of Priority Areas.

The National Framework

29. Section 7 of the Air Quality Act provides for the creation of a National Framework which sets out binding norms and standards for achieving the objectives of the Act. The current National Framework – the 2017 National Framework – was published on 26 October 2018.
30. Section 7(3) and 7(4) of the Air Quality Act provide that:

“(3) The national framework –

(a) binds all organs of state in all spheres of government; and

(b) may assign and delineate responsibilities for the implementation of this Act amongst

- (i) the different spheres of government; and*
- (ii) different organs of state.*

²⁰ Section 2(4)(b) of NEMA.

²¹ Section 2(4)(n) of NEMA.

(4) *An organ of state must give effect to the national framework when exercising a power or performing a duty in terms of this Act or any other legislation regulating air quality management.”*

31. During the mandatory five-year review cycles in 2007, 2012 and 2017, respectively, a number of specific mechanisms and national norms and standards were promulgated in terms of the National Framework and the Air Quality Act. These include NAAQS and List of Activities which “result in atmospheric emissions and which the Minister or MEC reasonably believes have or may have a significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage (**“the List of Activities”**)”.

National Ambient Air Quality Standards

32. In terms of section 9 of the Air Quality Act, the Minister must identify substances or mixtures of substances in ambient air which, through ambient concentrations, bioaccumulation, deposition or in any other way, present a threat to health, well-being or the environment. Furthermore, the Minister must, in respect of each of those substances or mixtures of substances, establish national standards for ambient air quality, including the permissible amount or concentration of each such substance or mixture of substances in ambient air.
33. National Standards have been set for eight pollutants: nitrogen dioxide (**“NO₂”**), ozone (**“O₃”**), sulphur dioxide (**“SO₂”**), carbon monoxide (**“CO”**), benzene (**“C₆H₆”**), lead (**“Pb”**), particulate matter – particles with aerodynamic diameter less than ten micron metres (**“PM₁₀”**),²² and particulate matter – particles with aerodynamic diameter less than two-and-a-half micron metres (**“PM_{2.5}”**).²³
34. For most pollutants, including PM₁₀, PM_{2.5}, and SO₂, NAAQS are set for both shorter term averaging periods (24 hours or less) and annual periods, because these pollutants can significantly harm human health with short-term exposures. In other words, even if ambient air is compliant with the annual averaging period standard for a pollutant, it can be non-compliant with the short-term standard.

List of Activities

35. In terms of section 21(1)(a) of the Air Quality Act, the Minister is required to publish, by notice in the Gazette, the List of Activities, specifically which activities require an AEL.
36. Anyone engaging in these listed activities is required to obtain an AEL, issued under Chapter 5 of the Air Quality Act. It is an offence to conduct any of the listed activities without a licence.²⁴
37. The List of Activities must also establish MES in respect of a substance or mixture of substances resulting from a listed activity identified in the notice. The MES should state the permissible amount, volume, emission rate or concentration of that substance or mixture of substances that may be emitted, and the manner in which measurements of such emissions must be carried out.
38. The purpose of the MES is to set the bare minimum level of regulation for emissions of identified pollutants. Licensing authorities – typically municipalities – may set emission limits that are more stringent than the MES, but **they may not allow emissions above the MES** [emphasis added]. This is designed to ensure a basic, uniform level of regulation, no matter the competence or capacity of the licensing authority.
39. The Minister published the first List of Activities, with associated MES, in March of 2010 following a multi-year, multi-stakeholder process. It required so-called “existing plants” to comply with one set of MES by April 2015

²² GN 1210 in GG 32816 of 24 December 2009.

²³ GN 486 in GG 35463 of 29 June 2012.

²⁴ Section 22 of the Air Quality Act.

(existing plant MES), and with stricter MES by April 2020 (new plant MES). Therefore, older plants were given a lead period of 5 years to comply with the more lenient 2015 standard, and a further 5 years to comply with the stricter standard by April 2020.

40. The List of Activities afforded plants an opportunity to apply to the National Air Quality Officer (“NAQO”) for a postponement of compliance with the MES. The NAQO could - with the concurrence of the municipal licensing authority which issues the company’s AEL – extend each deadline by a further five years if certain preconditions are met.
41. This rolling postponement mechanism has been used by largescale polluters including AMSA to achieve what is in effect an exemption from compliance.
42. In October 2018, the then Minister introduced amendments to the List of Activities, along the lines proposed in the 2017 National Framework. The 2018 amendments to the List of Activities also included a new provision, paragraph 12A. Paragraph 12A, makes provision for an existing plant to apply for an alternative emission limit in respect of a particular pollutant or pollutants if a number of preconditions are satisfied.

Priority Areas and Air Quality Management Plans

43. The Air Quality Act also provides for the designation of Priority Areas to ensure focused interventions across municipal and provincial boundaries.
44. Section 18 provides the Minister or relevant provincial MECs with the power to declare priority areas with the aim of taking steps to address the ambient air pollution so that there is compliance with NAAQS. The declaration may be withdrawn if the area is in compliance with NAAQS for at least two years.²⁵
45. The Air Quality Act requires the development of a priority area Air Quality Management Plan (“AQMP”), aimed at co-ordinating air quality management and addressing air quality issues.²⁶ Section 20 further makes provision for regulations to implement and enforce priority area air quality management plans.
46. The first generation AQMP of the VTAPA was published on 28 May 2009 followed by a mid-term review of it in 2013. Over a decade later, the initial AQMP was followed by the second generation AQMP of the VTAP published on June 2020. The Draft baseline assessment report of the second generation AQMP made comparisons of the Air Quality in VTAPA between 2009, 2013 and 2018. This assessment revealed that while there had been overall decreases in PM10 and NOX industrial emissions in VTAPA during this time, there had actually been an increase in SO2 industrial emissions. Furthermore, the results of a VTAPA health study conducted in 2013 – 2014 noted that air pollution in the VTAPA may be affecting child health.²⁷ Based on these and other findings, it has since been reported and concluded that since the establishment of the first generation AQMP of the VTAPA, there has not been a significant improvement in the air quality within this priority area.²⁸ These circumstances are relevant to the current application for alternative standards of SO2 emissions by AMSA.

International law obligations

²⁵ Section 18(5) of the Air Quality Act.

²⁶ Section 19 of the Air Quality Act.

²⁷ The Second Generation Vaal Triangle Airshed Priority Area Air Quality Management Plan: Draft Baseline Assessment Report, accessed at file:///C:/Users/PettaviaMadibana/Downloads/PETTAVIA%202025/vtapa%20second%20generation%20aqmp_draft%20baseline%20assessment%20report_public%20comment.pdf

²⁸ Cheledi Tshela, Caradee Y. Wright ‘15 Years after the National Environmental Management Air Quality Act: Is legislation failing to reduce air pollution in South Africa?’ (2019) accessed at file:///C:/Users/PettaviaMadibana/Downloads/PETTAVIA%202025/vtapa%20second%20generation%20aqmp_draft%20baseline%20assessment%20report_public%20comment.pdf

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47. The various obligations outlined above must be understood in light of South Africa's international law commitments, including the emerging international law right to a safe and healthy environment.²⁹
48. In a report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and waste, Marcos Orellana, noted that South Africa's "legislative framework offers a strong basis for the protection of the rights to life, health and a healthy environment."³⁰ However, this has been undermined by "postponements of or exemptions from compliance" which "have been extended to powerful corporate actors under the guise of economic development, job creation or security."³¹
49. The Special Rapporteur emphasised that not only are South Africa's air quality standards comparatively lenient, but the granting of exemptions and/or extensions also renders those standards of limited value.³²
50. Accordingly, the Special Rapporteur offered as his first recommendation under the "Air pollution and just transition" section, the recommendation that South Africa "[p]rohibit rolling postponements or exemptions of compliance with minimum emission standards."³³
51. Air pollution is the most lethal environmental challenge worldwide, causing a staggering 7 million premature deaths per year.³⁴ States have an obligation to respect and protect the rights of people from any real or potential environmental harm.³⁵ Children, in particular, are one of the most vulnerable groups to environmental harm, including and particularly air pollution, and are deserving of even greater protection by States.³⁶
52. In terms of General Comment 26 on the rights of children and the environment, the United Nation's Committee for the Rights of the Child ("CRC"), addressed the adverse effects of environmental degradation on the enjoyment of children's rights.
53. The General Comment affirms that there is a duty on States to consider the best interests of children in all significant environmental decisions:

"Environmental decisions generally concern children, and the best interests of the child shall be a primary consideration in the adoption and implementation of environmental decisions, including laws, regulations, policies, standards, guidelines, plans, strategies, budgets, international agreements and the provision of development assistance. Where an environmental decision may have a significant impact on children, conducting a more detailed procedure to assess and determine children's best interests that provides opportunities for their effective and meaningful participation, is appropriate."

²⁹ *Earthlife Africa v Minister of Environmental Affairs and Others* (2017) 2 All SA 519 (GP).

³⁰ Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Report on South Africa Visit, 31 July to 11 August 2023, 17 July 2024, at para 17.

³¹ *Ibid* at para 18.

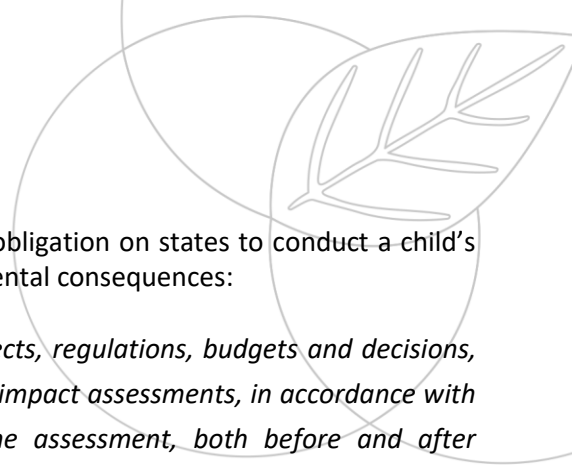
³² *Ibid* at para 107.

³³ *Ibid* at para C.

³⁴ World Health Organization, Health consequences of air pollution on populations, 25 June 2024, <https://www.who.int/news/item/25-06-2024-what-are-health-consequences-of-air-pollution-on-populations>; World Health Organization, 7 million premature deaths annually linked to air pollution, 25 March 2014, <https://www.who.int/news/item/25-03-2014-7-million-premature-deaths-annually-linked-to-air-pollution>.

³⁵ Office of the UN High Commissioner for Human Rights (OHCHR) '2016 Day of General Discussion: Children's Rights and the Environment' 23 September 2016. Available at <https://www.ohchr.org/en/events/days-general-discussion-dgd/2016/2016-day-general-discussion-childrens-rights-and> (last accessed on 1 April 2025).

³⁶ *Ibid*.

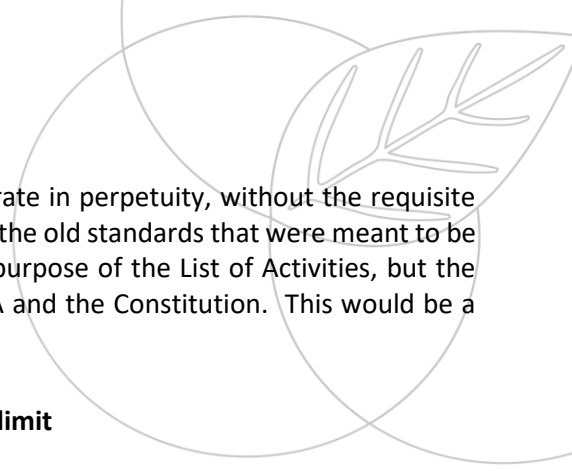
- 
54. To that end, the General Comment emphasises that there is a specific obligation on states to conduct a child's rights impact assessment where decisions will have significant environmental consequences:

"All proposed environment-related legislation, policies, projects, regulations, budgets and decisions, and those already in force, require vigorous children's rights impact assessments, in accordance with article 3(1) of the Convention. States should require the assessment, both before and after implementation, of the possible direct and indirect impact on the environment and climate, including the transboundary, cumulative, and both production and consumption effects, on the enjoyment of children's rights."

55. In *Deadly Air*, the Court held that "the principle of sustainable development further requires that measures put in place to achieve economic development should not sacrifice the environment and human life and well-being". AMSA proposes the prioritisation of economic growth at the expense of the environment, human health and human rights.
56. It is vital that in order to give effect to the right to healthy environment, States fulfil their obligation to regulate. In other words, States must actually create, implement, and enforce laws, policies, regulations, and programmes designed to protect the components of a healthy and safe environment, including clean air. It is our clients' submission that granting AMSA's alternative SO₂ minimum emission limit is a breach of the State's obligation. We elaborate on this point further in the section below.

The correct interpretation of the Listed Activities and the MES provisions

57. In terms of section 9 and 10 of the listed Activities, existing plants are allowed compliance with weaker more lenient limits, called the "existing plant standards" which provide for a higher level of allowed emissions, from 1 April 2015. Such existing plants were then required to comply with "new plant standards" which provide for a stricter standard (lower threshold of allowed emissions) by 1 April 2020. It is worth noting that the more lenient the emission standards, the more is allowed, and that with stricter standards, less pollution will result.
58. The purpose of the different limits and timeframes is to allow for older plants to have time to make headway and gain ground with compliance with air pollution standards provided for in the Air Quality Act. This can be done through the upgrading of facilities with abatement technologies to meet the stricter air pollution standards over time.
59. All three of the above-mentioned provisions must be read together to establish the most correct interpretation of the allowance provided for by Paragraph 12A mentioned above. The wording of paragraph 12A itself makes it clear that the allowance it provides is meant for the eventual but merely delayed compliance with the Minimum Emission Standards established for new plants. On proper reading of the Paragraph 12A, in line with the Constitution, the Air Quality Act and the National Framework, this provision was not intended to be an avenue for permanent non-compliance with the law.
60. Interpreting paragraph 12A to allow for alternative limits against the existing plant standards and for any period beyond 31 March 2025, would be a retrogressive application of the law. This interpretation would allow for any emissions, for any length of time, which is essentially, an exemption under section 59(1), and section 9(c) of the Air Quality Act which is impermissible. Weakening emissions in this way would mean that polluters would not have to comply with the MES, and NAAQS would never be complied with.

- 
61. To allow for polluters to be able to apply for alternative limits that operate in perpetuity, without the requisite timeframes for compliance; or to allow for alternative limits weaker than the old standards that were meant to be in compliance already in 2015, would make a mockery of not only the purpose of the List of Activities, but the entire air quality management legislative framework, and in turn, NEMA and the Constitution. This would be a blatant disregard of the purpose of the legislative framework.

AMSA does not meet the requirements for an alternative SO₂ emission limit

62. In terms of section of Paragraph 12A(c) *“the National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if: (i) there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or (ii) the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard.”*
63. The State of the Air Report presented by the Department of Forestry, Fisheries and the Environment at the 2022 Air Quality Lekgotla indicates that there is non-compliance with NAAQS for PM₁₀ and PM_{2.5} which can be converted from SO₂. This indicated that there is no material compliance with the NAAQS in the VTAPA. Ambient air in the area should be in compliance with the NAAQS in order to grant alternative limits. AMSA’s Atmospheric Impact Report considers the level of compliance with NAAQS but fails to consider the conversion of SO₂ to PM_{2.5} which is currently not in compliance with NAAQS.
64. Furthermore, the deficiencies in the Atmospheric Impact and Health Risk Assessment Report result in the reports not providing an accurate reflection of the increased health risk that will be occasioned by the granting of the alternative SO₂ limit. It is for these reasons that our clients submit that the requirements for an alternative SO₂ limit have not been satisfied and the alternative limit should accordingly be denied. The deficiencies in the Atmospheric Impact and the Health Risk Assessment Report are elaborated upon below.

Deficiencies in the Atmospheric Impact and Health Risk Assessment Reports

65. Expert reviews of the Atmospheric Impact and Health Risk Assessment Reports, identify significant deficiencies. The deficiencies are detailed in the section below.

Atmospheric Impact Report

66. Granting the requested alternative SO₂ emission limits would result in a significant increase of over 5,000 additional tons of SO₂ emissions per year, leading to higher levels of PM_{2.5} due to chemical conversion. This would further degrade air quality in the VTAPA, where PM₁₀ and PM_{2.5} levels already exceed NAAQS. The Atmospheric Impact Report does not adequately assess the impact of these emissions on particulate matter levels, as it relies on the AERMOD modelling system, which does not account for SO₂ transformation into sulfate aerosols. More advanced models such as CMAQ or CAMx should have been used to accurately evaluate secondary PM_{2.5} formation.
67. Furthermore, existing SO₂ concentrations near AMSA frequently exceed NAAQS limits, and increasing emissions through alternative limits would likely worsen these exceedances. Even the slight reduction in SO₂ emissions projected under Scenario 4 (by approximately 1,460 tons per year) is insufficient to bring air quality into compliance. The justification for the alternative limits is flawed, as the AIR does not demonstrate that relaxing the 500 mg/Nm³ standard is necessary or that it would lead to compliance with air quality regulations. Given the already critical pollution levels in the VTAPA, granting these alternative limits would likely exacerbate non-compliance rather than improve conditions.

Health Risk Assessment Report

68. A review of these reports conducted by the Centre for Research on Energy and Clean Air, identifies several methodological flaws that significantly underestimate the health risks. One major omission is the failure to assess the health impact of secondary pollutants, particularly sulfate PM_{2.5}, which poses severe respiratory and cardiovascular health risks. Furthermore, the geographical coverage of AMSA's assessment is insufficient, only considering a 10 km x 10 km area, whereas air pollutants can travel hundreds of kilometers, affecting a much larger population. The omission of mercury emissions in AMSA's environmental impact reports is another significant gap, as weaker SO₂ controls would likely lead to increased mercury emissions, which have serious neurological and cardiovascular health consequences.
69. The Atmospheric Impact Report estimates that raising SO₂ limits could result in an annual emission increase of 8,413 to 15,595 tons per annum. Previous studies suggest that such an increase would lead to substantial public health consequences, including thousands of excess deaths per year due to air pollution. Moreover, AMSA's failure to consider long-range pollution dispersion and its health effects further undermines the reliability of its findings. International studies have shown that sulfate PM_{2.5} is significantly more hazardous than SO₂ alone, with exposure leading to a significantly higher risk of mortality. Furthermore, weakening SO₂ emissions controls contradicts South Africa's MES and international best practices, which recommend the use of wet or dry scrubbers to reduce SO₂ emissions by 90% or more. Granting AMSA's application could have severe consequences for air quality, public health, and compliance with international environmental commitments. A copy of CREA's review of AMSA's Atmospheric Impact Report as well as its Health Risk Assessment is attached as "**Annexure A**".
70. These health impacts are especially pronounced where children and the elderly are concerned. AMSA's Motivation Report identifies at least 24 schools and old age homes in close proximity to AMSA's Vanderbijlpark Works.

Conclusion

71. It is our clients' submission, that on a correct interpretation, Paragraph 12A are not permissible in law. Even, in the event that is found that they are permissible, AMSA does not meet the requirements for the granting of an alternative SO₂ limit for reasons discussed above and accordingly its application should be refused.

Yours faithfully

CENTRE FOR ENVIRONMENTAL RIGHTS

per:

: 

Michelle Sithole

Attorney

Direct email: msithole@cer.org.za

From: [Michelle Sithole](#)
To: [Karien Zantow](#); [Mbali Zwane](#)
Cc: [Thandeka Kathi](#); [Mosangoaneng Leteane](#)
Subject: Re: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
Date: Monday, 15 June 2026 18:52:39
Attachments: [image001.jpg](#)
[image002.jpg](#)
[Outlook-Email sign](#)
[Outlook-Email sign](#)
[2026.06.15 VEJA Objections to AMSA section 12A Application.pdf](#)

Dear Ms Zantow,

The above matter refers.

Please find attached our client's, VEJA, objections to AMSA's Section 12A alternative SO2 emission limit application.

Kindly acknowledge receipt hereof.

Regards,

Michelle Sithole
Centre for Environmental Rights NPC
A non-profit company with registration number 2009/020736/08
PBO No. 930032226, NPO No. 075-863, VAT No. 4770260653
and a Law Clinic registered with the Legal Practice Council
1st floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray 7700, South Africa
Tel: +27 21 447 1647
Email: msithole@cer.org.za Website: www.cer.org.za
Facebook: www.facebook.com/CentreEnvironmentalRights Twitter: www.twitter.com/CentreEnvRights

Email signature



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More reports of environmental violations assist in justifying more investment in more inspectors, and more enforcement of environmental laws.

Numbers matter! Take the time to report violations, even if you have done so elsewhere. For more information about this CER campaign, visit <http://cer.org.za/news/numbers-matter-join-us-in-reporting-violations-of-environmental-rights>.

From: Michelle Sithole <msithole@cer.org.za>
Sent: Tuesday, June 9, 2026 3:40 PM
To: Karien Zantow <Karien@zantow.co.za>; Mbali Zwane <Mbali@zantow.co.za>
Cc: Thandeka Kathi <tkathi@cer.org.za>; Mosangoaneng Leteane <mleteane@cer.org.za>
Subject: Re: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application

Thank you, Karien. I can confirm that we are able to download the documents.

Regards,

Michelle Sithole

Centre for Environmental Rights NPC

A non-profit company with registration number 2009/020736/08

PBO No. 930032226, NPO No. 075-863, VAT No. 4770260653

and a Law Clinic registered with the Legal Practice Council

1st floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray 7700, South Africa

Tel: +27 21 447 1647

Email: msithole@cer.org.za Website: www.cer.org.za

Facebook: www.facebook.com/CentreEnvironmentalRights Twitter: www.twitter.com/CentreEnvRights

Email signature



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Numbers matter! Take the time to report violations, even if you have done so elsewhere. For more information about this CER campaign, visit <http://cer.org.za/news/numbers-matter-join-us-in-reporting-violations-of-environmental-rights>.

From: Karien Zantow <Karien@zantow.co.za>

Sent: Tuesday, June 9, 2026 3:08 PM

To: Michelle Sithole <msithole@cer.org.za>; Mbali Zwane <Mbali@zantow.co.za>

Cc: Thandeka Kathi <tkathi@cer.org.za>; Mosangoaneng Leteane <mleteane@cer.org.za>

Subject: RE: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application

Good Afternoon

<https://www.dropbox.com/scl/fo/9m5raegdgro2zkgqe2p0w/APOhBnkJRqVp9la-n7Dgak?rlkey=26huk06yuv2g1jaaxekcq8hmf&st=4vnajl02&dl=0>

Please find the link to the report. Kindly let me know if you can download the report from dropbox, or if we should share it in another way.

Kind Regards

Karien

Description: zantow-email-signature



Karien Zantow

Environmental Consultant
SACNASP Reg Nr 400114/14
EAPASA Reg Nr 2019/1871
T: 083 3843 641 F: 016 932 4976
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From: Michelle Sithole <msithole@cer.org.za>
Sent: Tuesday, 09 June 2026 12:31
To: Mbali Zwane <Mbali@zantow.co.za>; Karien Zantow <Karien@zantow.co.za>
Cc: Thandeka Kathi <tkathi@cer.org.za>; Mosangoaneng Leteane <mleteane@cer.org.za>
Subject: Re: Notice of Public Participation - ArcelorMittal S12A Alternative SO2 emission limit application
Importance: High

Dear Ms Zwane,

The above matter refers.

Will you kindly share the detailed motivation report, atmospheric impact report as well as the community health risk assessment, at your earliest convenience.

Regards,

Michelle Sithole
Centre for Environmental Rights NPC
A non-profit company with registration number 2009/020736/08
PBO No. 930032226, NPO No. 075-863, VAT No. 4770260653
and a Law Clinic registered with the Legal Practice Council
1st floor, Birkdale 2, River Park, 1 River Lane, Liesbeek Parkway, Mowbray 7700, South Africa
Tel: +27 21 447 1647
Email: msithole@cer.org.za Website: www.cer.org.za
Facebook: www.facebook.com/CentreEnvironmentalRights Twitter: www.twitter.com/CentreEnvRights

Email signature

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More reports of environmental violations assist in justifying more investment in more inspectors, and more enforcement of environmental laws.

Numbers matter! Take the time to report violations, even if you have done so elsewhere. For more information about this CER campaign, visit <http://cer.org.za/news/numbers-matter-join-us-in-reporting-violations-of-environmental-rights>.

From: Mbali Zwane <Mbali@zantow.co.za>

Sent: Friday, May 15, 2026 8:01 AM

To: musa@groundwork.org.za <musa@groundwork.org.za>; Info <info@cer.org.za>; Brandon Abdinor <babdinor@cer.org.za>; Nicole Loser <nloser@cer.org.za>; stefancramer@gmail.com <stefancramer@gmail.com>; Skhumbuzot@veja.org.za <Skhumbuzot@veja.org.za>; Jacobsebidj.jnp@gmail.com <Jacobsebidj.jnp@gmail.com>; mduduzit@veja.org <mduduzit@veja.org>; Bonganimute2@gmail.com <Bonganimute2@gmail.com>; Michelle Sithole <msithole@cer.org.za>

Cc: Karien Zantow <Karien@zantow.co.za>

Subject: Notice of Public Participation - ArcelorMittal S12A Alternative SO₂ emission limit application

Some people who received this message don't often get email from mbali@zantow.co.za. [Learn why this is important](#)

Dear Interested and Affected Party

NOTICE OF APPLICATION FOR AN ALTERNATIVE SO₂ EMISSION LIMIT IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 (AS AMENDED) PROMULGATED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004 (ACT NO. 39 OF 2004)

ARCELORMITTAL SOUTH AFRICA – VANDERBIJLPARK WORKS, GAUTENG PROVINCE

ArcelorMittal South Africa (“AMSA”) operates the Vanderbijlpark Works as an integrated iron and steel manufacturing facility located within the Vaal Triangle Airshed Priority Area.

The Vanderbijlpark Works was legally operational prior to 1 April 2010 and therefore constitutes an “existing plant” in terms of the Listed Activities and Associated Minimum Emission Standards (“MES”) published under Government Notice 893 (as amended) in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (“NEM:AQA”).

The facility currently operates under Atmospheric Emission Licence (“AEL”) Reference Number AEL0003/SDM/2012 issued by the Sedibeng District Municipality.

Emission monitoring results indicate that the Direct Reduction (“DR”) Kilns are compliant with the applicable new plant Minimum Emission Standards for particulate matter (“PM”) and oxides of nitrogen (“NO_x”). However, the DR Kilns have not been able to achieve compliance with the applicable new plant SO₂ emission standard of 500 mg/Nm³.

ArcelorMittal South Africa therefore intends submitting an application in terms of Regulation 12A of Government Notice 893 (as amended) to the National Air Quality Officer for an alternative SO₂ emission limit of 1 500 mg/Nm³ applicable to

DR Kilns 4, 5 and 6.

The application is supported by:

- a detailed Motivation Report;
- an Atmospheric Impact Report ("AIR") compiled by Airshed Planning Professionals; and
- a Community Health Risk Assessment ("HHRA") compiled by INFOTOX.

The specialist studies concluded that:

- the proposed alternative emission limit would not result in exceedances of the applicable National Ambient Air Quality Standards at the assessed sensitive receptors;
- overall works-wide SO₂ reductions are still achieved under the revised operational scenarios assessed;
- and the proposed alternative emission limit would not result in a material increase in community health risk at the surrounding receptor locations.

Interested and affected parties are hereby notified that a previous Section 12A application relating to the DR Kilns was previously submitted during 2025, but was subsequently withdrawn following material changes to the operational strategy and future operational assumptions applicable to the Vanderbijlpark Works.

Since withdrawal of the previous application, significant operational and strategic changes have occurred at the facility, including:

- cancellation of the previously proposed Electric Arc Furnace ("EAF") project;
- abandonment of the proposed future coke battery expansion programme;
- shutdown of Coke Batteries 6, 7, 8 and 9;
- revised operational restructuring measures; and
- revised future operational and emissions reduction strategies.

The revised application therefore includes updated operational assumptions, revised emissions inventories, updated atmospheric modelling, revised health risk assessments, updated socio-economic considerations, and revised operational motivations reflecting the current operational configuration of the Vanderbijlpark Works.

A Background Information Document ("BID") is available, should you require a summary of the reports and information. Interested and affected parties are invited to:

- register as stakeholders;
- review the available reports;
- submit written comments, concerns, objections, or requests for additional information; and
- participate in the public participation process.

Stakeholders who submitted comments during the previous Section 12A application process may also indicate whether they wish for their previous comments, objections, submissions, and representations to be carried forward and considered as part of this revised application process. All comments received during the public participation process will be considered and responded to within the final application report submitted to the Competent Authority.

To obtain further information, raise any issues or concerns, or submit any comments please contact Zantow Environmental Consulting Services at the contact details below, within 30 days of this notice.

Zantow Environmental Consulting Services CC:
Karien Zantow
Cell: 083 393 3897
Email: info@zantow.co.za / karien@zantow.co.za
PO Box: 3858, Vanderbijlpark, 1900

Please note that the S12A application will be available for review from the **15th May 2026** to the **15th June 2026** at the following locations:

Website: www.zantow.co.za (downloads)
E-mail: info@zantow.co.za / karien@zantow.co.za / (on request)
Hard copy: ArcelorMittal Vanderbijlpark, Delfos Boulevard (security office at the access gate)
& Emfuleni Public Library

A public meeting is scheduled for **the 27th May 2026 at Stonehaven on Vaal, Vanderbijlpark**. Please contact Zantow Environmental Consulting Services should you require further information regarding the venue, format, or attendance arrangements.

Kind Regards

Mbali

Description: zantow-email-signature



Mbali Zwane
Environmental Consultant
SACNASP Reg Nr 170448
T: 081 375 4647
E: mbali@zantow.co.za
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Annexure D9

Comments and response report

COMMENT AND RESPONSE REPORT

Application for Alternative SO₂ Emission Limits in terms of Regulation 12A of Government Notice 893

ArcelorMittal South Africa (AMSA) – Vanderbijlpark Works

Direct Reduction (DR) Kilns

6 July 2026

1. INTRODUCTION

ArcelorMittal South Africa ("AMSA") made available a Draft Application for Alternative SO₂ Emission Limits in terms of Regulation 12A of Government Notice 893 for public review and comment.

Written comments were received from the Vaal Environmental Justice Alliance ("VEJA"), including reference to previous comments submitted during the now withdrawn 2025 application process.

This Comment and Response Report has been compiled to record stakeholder comments received and to provide formal responses to issues raised.

The previous 2025 application was formally withdrawn due to material changes in the operational strategy, future plant configuration, and financial position of ArcelorMittal South Africa. The current application therefore constitutes a revised and independent application based on updated operational information, revised emissions scenarios, updated specialist assessments and current operational realities applicable to the Vanderbijlpark Works.

This report should be read together with:

- Motivation Report (2026);
- Atmospheric Impact Report (AIR);
- Community Health Risk Assessment (HHRA);
- Supporting annexures.

Comments received from CER & VEJA	Response
COMMENT 1 The concerns raised during the 2025 application have not been addressed in the revised application.	AMSA Response The statement is respectfully disputed. The CER attached their comments dated 3 April 2025 on the now withdrawn application as “Annexure A”, which they advise forms part of their comments on the revised application. We have already submitted prior rebuttals to the 2025 comments, in part by its legal representatives in consultation with AMSA and its specialist advisors. We attached these responses as “Annexure R1” which accordingly still serve as answers to the 2025 comments in context of the application at the time and to the extent that any element thereof remains salient in respect of the current application. In this regard it should be noted that then CER, at the time represented both the VEJA and GroundWork. However, this latest set of comments on the revised application are submitted on behalf of VEJA only. In the interest of transparency, the CER is called upon to disclose which organisations they in fact represent in the current application, and specifically whether the 2025 comments are still presented on behalf of GroundWork as well. Given the circumstances, it is appropriate that the CER provide an appropriate power of attorney in that regard. Apart from the fact that the 2025 submission were comprehensively responded to, illustrating that the matters raised therein were spurious, inaccurate or irrelevant, the current 2026 application is substantially different from the withdrawn 2025 application and incorporates significant revisions and additional information. The following improvements have been incorporated: • Withdrawal of the previous application and explanation of the reasons for withdrawal; • Updated operational strategy based on current operational realities; • Revised works-wide SO₂ reduction scenarios; • Updated Atmospheric Impact Report; • Inclusion of a Community Health Risk Assessment; • Expanded technical feasibility assessment; • Expanded socio-economic assessment;

Comments received from CER & VEJA	Response
	- Expanded historical emissions reduction assessment; - Updated decarbonisation strategy. The current application should therefore be considered independently on its own merits.
COMMENT 2 Section 12A is no longer available after 1 April 2025.	AMSA Response Paragraph 12A contains no sunset clause and does not prescribe a cut-off date for submission of applications. The wording specifically states that an existing plant may submit an application regarding a new plant standard where compliance cannot be achieved for a specific pollutant. The salient interpretational objections raised by the CER had already been decided by Minister Creecy in the appeal decision of 4 April 2024 (LSA 234243) and maintained in the subsequent decision of Minister George (LSA 234243/2) of 25 July 2024. The Ministers' finding hold that an alternative emissions standard in terms of paragraph 12A may be granted and was granted beyond 1 April 2025. (Please refer to our more detailed responses regarding the correct interpretation and application of section 12A) against comment 20 below.) This decision which incorporates the correct application of section 12A must be given effect to in accordance with the principles set out in Oudekraal Estates (Pty) Ltd v City of Cape Town and Others¹. In this matter, the SCA determined that an administrative order stands until set aside by a court of competent jurisdiction. Until that is done, the administrative order is presumed to be correct². These decisions remain valid administrative decisions unless set aside by a court of competent jurisdiction.

¹ 2004 (6) SA 222 (SCA); see also MEC for Health, Eastern Cape and Another v Kirland Investments (Pty) Ltd 2014 (3) SA 481 (CC) at para [101]

² p242 *“Until the Administrator’s approval (and thus also the consequences of the approval) is set aside by a court in proceedings for judicial review it exists in fact and it has legal consequences that cannot simply be overlooked. The proper functioning of a modern State would be considerably compromised if all administrative acts could be given effect to or ignored depending upon the view the subject takes of the validity of the act in question. ...”*. See also Baxter Administrative Law at 355: *“There exists an evidential presumption of validity expressed by the maxim omnia praesumuntur rite esse acta; and until the act in question is found to be unlawful by a court, there is no certainty that it is. ...”*

Comments received from CER & VEJA	Response
	The present application has therefore been prepared in accordance with the applicable legislative framework. Report References Motivation Report • Section 3.4 – NEM:AQA Section 21 Requirements and Compliance Timeframes • Section 3.4.1 – Assessment of the applicability and validity of Regulation 12A • Section 3.4.2 – Legal interpretation of Section 12A
COMMENT 3 Why should this application be treated differently from a normal postponement application?	Response The current application is fundamentally different from the postponement mechanism previously available under NEM:AQA. A postponement application seeks temporary relief from compliance while specific projects were implemented to achieve compliance. A Regulation 12A application, by contrast, recognises circumstances where compliance with a specific pollutant standard cannot reasonably be achieved despite previous reductions, measures implemented and investments undertaken. The application therefore focuses on demonstrating: • previous reductions achieved; • technical feasibility limitations; • acceptable ambient air quality impacts; • acceptable health impacts; • and broader environmental, operational and socio-economic considerations. This is an important distinction for the Competent Authority when considering the application.
COMMENT 4 The application is located within the <u>Highveld Priority Area</u> and therefore the application should not be supported due to the existing air quality challenges within the airshed. The application is located within the highveld and therefore the application should not be supported due to the existing air quality challenges within the airshed.	AMSA Response ArcelorMittal South Africa notes that the 2026 comments submitted by CER contain references to the Highveld Priority Area (HPA). The ArcelorMittal Vanderbijlpark Works, however, is located within the Vaal Triangle Airshed Priority Area (VTAPA), which was declared separately in terms of Section 18 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).

Comments received from CER & VEJA	Response
	While both Priority Areas experience historical industrial air quality challenges and share certain common air quality management objectives, they are distinct regulatory airsheds with different geographical boundaries, source profiles, emission inventories, ambient monitoring networks and Air Quality Management Plans. The current application, Atmospheric Impact Report (AIR), Community Health Risk Assessment (HHRA), and Motivation Report have all been prepared specifically with reference to the Vaal Triangle Airshed Priority Area and its associated environmental context. The AIR and HHRA utilise the appropriate local ambient air quality information, sensitive receptor locations and emissions scenarios applicable to the Vanderbijlpark Works and the surrounding Vaal Triangle region. Whilst this reference does not alter the substantive issues raised by the stakeholder, it suggests that portions of the comments may have been derived from broader concerns applicable to Priority Areas generally, rather than from the specific technical assessments undertaken for the Vanderbijlpark Works application. For the purpose of the comments, we are assumed the stakeholder meant to reference the VTAPA.
COMMENT 5 ArcelorMittal has had sufficient time to comply with the new plant standards.	AMSA Response ArcelorMittal acknowledges that significant time has elapsed since publication of the Minimum Emission Standards. The VEJA is not entrenched in the steel manufacturing industry, the commercial South African context of the AMSA operations, or the exigencies that generally apply to the process of large-scale steel manufacturing. It is accordingly submitted that VEJA is not in a position to make any informed judgement on what is presume to be “ample” time. The subject matter is of an extremely complex and technical nature, and the VEJA adduces no evidence for their position as to what timeframe is in fact feasible given the unique position AMSA finds itself in. Further, the legislature itself envisaged that compliance with the stricter emission standards may be hard or even impossible to achieve in certain instances. Were it not so, there would have been no need for the legislature to introduce section 12A which allows for an emitter to adhere to an alternative emission standard. The DR Kilns present unique technical challenges due to the metallurgical reduction process utilised.

Comments received from CER & VEJA	Response
	The primary source of SO₂ emissions is the sulphur contained within the coal used as an intrinsic reductant material rather than solely as a fuel source. Numerous investigations and interventions have been undertaken, including: - operational optimisation measures; - coal quality management; - sulphur reduction technology investigations; - hydrated lime injection trials; - broader works-wide emission reduction initiatives. Despite these interventions, no technically feasible and economically sustainable solution has yet been identified to consistently achieve the applicable new plant SO₂ standard of 500 mg/Nm³. Section 12A specifically exists to provide a mechanism for circumstances where technically feasible compliance cannot reasonably be achieved despite previous efforts and investments. Report References Motivation Report - Section 4 – Discussion on Emission Reduction Strategy Impacts
COMMENT 6 ArcelorMittal cannot commit to a future compliance date.	AMSA Response ArcelorMittal acknowledges that a definitive compliance date for achieving 500 mg/Nm³ cannot currently be committed to. This is due to: - ongoing changes to the operational configuration; - financial constraints; - evolving decarbonisation strategies;

Comments received from CER & VEJA	Response
	- the current absence of proven technically feasible solutions for the DR Kiln process. While Paragraph 12A does not explicitly require a definitive future compliance date, ArcelorMittal acknowledges the importance of establishing a realistic pathway forward. Accordingly, the application proposes an interim period linked to the anticipated remaining operational lifespan of the DR kilns, ongoing technology investigations, and periodic reassessment opportunities. The legal requirements relate to: - previous emission reductions; - measures implemented; - direct investments made; - demonstration that ambient air quality and health impacts remain acceptable. These requirements have been addressed in the application. Report References Motivation Report - Section 4 – Technical feasibility discussion - Section 4 – Future technology investigations - Section 4 – Interim pathway and anticipated 8–10 year period - Section 4 – Revised operational strategy - Section 4 – Financial constraints
COMMENT 7 The Vaal Triangle Airshed Priority Area remains highly polluted and AMSA should therefore not be granted relief.	AMSA Response ArcelorMittal acknowledges the significance of the Vaal Triangle Airshed Priority Area and supports initiatives aimed at improving regional air quality. However, the existence of a Priority Area does not automatically preclude consideration of a Regulation 12A application. The application must be evaluated against the specific pollutant under consideration, namely SO₂.

Comments received from CER & VEJA	Response
	The specialist assessments concluded that: • ambient SO₂ concentrations remain within applicable NAAQS; • no exceedances are predicted at sensitive receptors; • particulate matter remains the dominant pollutant of concern within the VTAPA. The application therefore satisfies the pollutant-specific legal tests prescribed in Paragraph 12A. The AIR and HHRA further demonstrate that granting the application would not undermine the objectives of the Vaal Triangle Airshed Priority Area Air Quality Management Plan. The application in question pertains to specific emissions in a specific context, supported by expert community health related assessments and evidence. Broad and entirely un-contextualised statement that pollution has human and capital cost (such as in paragraph 14 of the comments) is not helpful and cannot carry any weight in consideration of the application. Report References Motivation Report Section 3.7 – Alignment with VTAPA AQMP Section 3.5 – National Ambient Air Quality Standards Section 3.5.1 – HHRA and NAAQS relationship AIR Section: • Existing ambient conditions • NAAQS compliance • Sensitive receptor assessment HHRA Section: • Background ambient conditions • Community exposure assessment
COMMENT 8	AMSA Response

Comments received from CER & VEJA	Response
The Atmospheric Impact Report remains deficient.	The revised AIR was specifically updated to address the revised operational configuration of the Vanderbijlpark Works. The AIR incorporated: - revised future operational scenarios; - sensitive receptor assessments; - NAAQS comparisons; - overall works-wide SO₂ reduction assessments; - PM_{2.5} and PM₁₀ assessments. The AIR concluded that no exceedances of the applicable SO₂ National Ambient Air Quality Standards are predicted under any assessed scenario. The AIR therefore supports the requirements contained within Paragraph 12A. The CER also does not identify in paragraph 71 of their comments which experts performed the “expert reviews” of the AIR. This fact alone brings the veracity and reliability of the comments in question. Report References AIR Section: - Modelling methodology - Model selection (AERMOD) - Sensitive receptor selection - Scenario descriptions - NAAQS comparisons - Results and conclusions
COMMENT 9 The application will negatively affect community health.	AMSA Response A separate Community Health Risk Assessment was commissioned specifically to evaluate this concern.

Comments received from CER & VEJA	Response
	The assessment concluded that: • attributable fractions for asthma exacerbation and natural mortality remain below 5%; • incremental health risks, including that potentially associated with PM conversion (See our responses to comment 11 below), are insignificantly different from background risks; • no material increase in community health risk is expected. The HHRA therefore supports the conclusion that the proposed alternative emission limit will not result in significant additional health impacts.
COMMENT 10 Future emissions reductions are uncertain due to cancellation of previously proposed projects.	AMSA Response ArcelorMittal acknowledges that certain projects previously contemplated are no longer financially feasible. This was the primary reason for withdrawal of the 2025 application. The current application intentionally excludes projects that can no longer be committed to and instead relies on realistic and current operational assumptions. The revised application therefore presents a more conservative, transparent and realistic emissions reduction trajectory. The competent authority is accordingly requested to assess the application based on the current operational strategy rather than the assumptions associated with the withdrawn application.
COMMENT 11 The AIR failed to assess the conversion of SO₂ to PM_{2.5}/PM₁₀ and therefore underestimates cumulative air quality and health impacts.	AMSA RESPONSE The statements in this comment are untrue. This matter was raised during the previous 2025 application process and has been specifically considered in both the revised Atmospheric Impact Report (“AIR”) and the Community Health Risk Assessment (“HHRA”). It is important to distinguish between the purpose and capabilities of the Atmospheric Impact Report and the broader assessment of community health impacts.

Comments received from CER & VEJA	Response
	The AIR was undertaken using AERMOD in accordance with the South African Regulations Regarding Air Dispersion Modelling and accepted atmospheric modelling practices applicable to regulatory applications under the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004). AERMOD is the accepted regulatory near-field dispersion model used extensively in South Africa to evaluate ambient impacts from industrial sources. The primary purpose of the AIR was to evaluate whether the proposed alternative SO₂ emission limit would result in exceedances of the applicable National Ambient Air Quality Standards (“NAAQS”) at identified sensitive receptors within the modelling domain. (See in this regard also AMSA’s response to the CER’s submissions on the prerequisites and interpretation of section 12A below (Comment 20) in context of this application) The AIR concluded that no exceedances of the applicable SO₂ NAAQS are predicted at any of the assessed sensitive receptor locations under any of the scenarios modelled. While AERMOD does not explicitly perform complex atmospheric chemistry calculations to simulate the gradual conversion of SO₂ to secondary sulphate particulates over large regional scales. However, this does not invalidate the assessment for several reasons. <u>Firstly</u>, the present application specifically relates to SO₂, which is already a regulated criteria pollutant with established National Ambient Air Quality Standards in South Africa. The legal test under Regulation 12A is therefore centred on whether material compliance with the applicable SO₂ ambient standards is achieved and whether unacceptable health impacts are expected. <u>Secondly</u>, sulphate formation is generally a slower atmospheric process that occurs over broader regional scales and is influenced by numerous variables, including atmospheric residence time, solar radiation, humidity, oxidant availability, and regional background chemistry. The AIR focused on near-field impacts where the greatest concentrations from the Vanderbijlpark Works are expected to occur and where AERMOD is considered appropriate and accepted within the South African regulatory framework. <u>Thirdly</u>, and importantly, the Community Health Risk Assessment specifically addressed this issue. The HHRA concluded that any potential conversion of SO₂ to sulphate particulates and associated health effects are inherently incorporated into the epidemiological studies used to derive the health effect relationships associated with SO₂ exposure.

Comments received from CER & VEJA	Response
	The arguments of CER do not reflect an objective understanding of sources of air PM2.5 pollution and associated impacts on community health. In the INFOTOX health risk assessment report (Fourie and Van Niekerk 2026)³, median values of 24-hour averaged modelled SO2 concentrations in ambient air at receptor locations in the area are around 15 µg/m3 and less for the modelling scenarios of interest. Modelling of atmospheric chemistry and fate is complicated, and regulatory agencies do not always have the expertise to review such analyses, and a simplified approach was adopted in the USA. Regulators deal with the formation of secondary PM2.5 in SO2 modelling using AERMOD by applying an offset ratio for PM2.5. This method is used to evaluate total (direct and indirect) PM impacts in the environmental air permitting and emissions trading program. This offset-ratio principle and emissions trading are not applicable in South African legislation, but considering the concept of offset ratios provides insights into the significance of secondary PM2.5 formation. The offset ratios ascertained from various investigations ranged from 10:1 to 20:1 for SO2 (Guerra et al. 2014)⁴. An SO2 offset ratio of 10:1 means that for every 10 units of SO2 emitted, these emissions must be offset by reducing 1 unit of fine particulate matter. An SO2 offset ratio of 20:1 means that for every 20 units of SO2 emitted, these emissions must be offset by reducing 1 unit of fine particulate matter. Inputs into AERMOD account for primary and secondary PM2.5, both released from the stack as source emissions. This is clearly a simplified approach, as it assumes that both primary and secondary PM 2.5 are emitted from the stack, when in reality secondary formation happens gradually over time and space. Nevertheless, the <u>conservative</u> estimate suggests that the maximum secondary PM2.5 formed from SO2 as a precursor could be 5-to-10 per cent of the release rate of SO2. Although this cannot be used to accurately determine ambient air concentrations of PM2.5 without running the AERMOD model, it is reasonable to estimate that the maximum secondary PM2.5 would correspond with a small fraction of the already-low SO2 concentrations in ambient air, and that the highest concentration of secondary PM2.5 would be some distance from the source. Considering the data presented by Guerra et al. (2014), and depending on several factors as highlighted in Section 2 above, this distance could well be beyond the modelling domain of a radius of 5 km around the ArcelorMittal Vanderbijlpark Works. At the same time, it must

³ Fourie MH and Van Niekerk WCA. 2026. Community Health Risk Assessment for Exposure to Sulfur Dioxide. INFOTOX Report No 010-2026 Rev 2.0

⁴ Guerra SA, Olsen SR and Anderson JJ. 2014. Evaluation of the SO and NO offset ratio method to account for secondary PM formation. Journal of the Air & Waste Management Association, 64(3):265–271. <https://doi.org/10.1080/10962247.2013.852636>.

Comments received from CER & VEJA	Response
	be recognised that ambient air concentrations of PM_{2.5} due to primary emissions would reduce over distance from the source because of dispersion. It is very important to recognise that apart from industrial sources, significant particulate matter originates from multiple other regional sources in the VTAPA. The CER fails to take into consideration the significant contribution to airborne particulates by coal and biomass burning, as well as waste burning in townships and informal settlements in the same geographic area as ArcelorMittal. It is therefore not scientifically appropriate to attribute regional particulate matter concentrations solely or even predominantly to the SO₂ emissions associated with the Direct Reduction Kilns. Overall, based on qualitative interpretation and scientific logic, the secondary PM_{2.5} contribution to community health risks from SO₂ emitted from the ArcelorMittal Vanderbijlpark Works can be regarded as very little, even insignificant. Accordingly, AMSA's expert consultants are of the opinion that the AIR, together with the HHRA, adequately addresses both the direct ambient impacts of SO₂ and the broader health implications associated with potential secondary sulphate formation. The available evidence does not indicate that the proposed alternative emission limit would result in unacceptable ambient air quality impacts, or a material increase in community health risk.
COMMENT 12 AMSA failed to comply with the alternative emission limits previously granted in terms of the 2020 postponement and should therefore not receive further regulatory relief.	ArcelorMittal South Africa acknowledges that the Direct Reduction ("DR") Kilns were unable to comply with the alternative SO₂ emission limits granted as part of the postponement approval issued in 2020. However, it is important to provide the appropriate context to this matter. Historically, the DR Kilns were compliant with the applicable existing plant SO₂ emission standard of 1 700 mg/Nm³, which represented the emission level that could reasonably be achieved through the existing technology and operational controls available for the process. As part of the postponement application submitted in 2019/2020, ArcelorMittal requested an alternative SO₂ emission limit of 1 700 mg/Nm³, based on the technical assessments and information available at the time. However, the postponement approval granted substantially lower alternative emission limits, ranging between approximately 500 mg/Nm³ and 800 mg/Nm³ for the various DR kiln stacks.

Comments received from CER & VEJA	Response
	Subsequent operational experience, stack emissions monitoring, and technical investigations confirmed that these approved alternative emission limits could not be consistently achieved under normal operating conditions. The inability to achieve the approved limits was not due to a lack of effort or failure to implement mitigation measures, but rather because the technological assumptions and achievable emission reductions initially envisaged could not be realised in practice. Since the postponement approval, ArcelorMittal has undertaken numerous investigations and interventions aimed at reducing SO₂ emissions, including: • optimisation of kiln operating parameters; • management and optimisation of coal quality where possible; • investigations into sulphur reduction technologies; • hydrated lime injection trials; • broader works-wide emissions reduction initiatives; and • revised operational and process strategies across the Vanderbijlpark Works. The outcomes of these investigations have provided a significantly improved understanding of the technical limitations associated with reducing SO₂ emissions from the DR kiln process. The current Section 12A application therefore reflects these learnings and presents a more realistic, technically substantiated and transparent assessment of what can reasonably be achieved under the current operational configuration. The current application represents SO₂ emission reduction from the baseline by 15.3% and from the current position by 17%. PM reduction is almost 30% from the baseline and 6% from the current position. While it is true that AMSA cannot comply with the new plant standards, necessitating this application, AMSA has seen significant reduction over the years (i.e. 85% in the last 20 years) The present application should therefore not be viewed as a continuation of the previous postponement application, but rather as a new application in terms of Regulation 12A, supported by updated technical investigations, revised operational scenarios, updated atmospheric modelling, a Community Health Risk Assessment, and revised socio-economic considerations. Report References Motivation Report • Section 3.4: NEM Section 21 Requirements and Compliance Timeframes

Comments received from CER & VEJA	Response
	• Section 4: Discussion on Emission Reduction Strategy Impacts • Coal quality assessment • Hydrated lime injection trial summary • Historical emissions reductions AIR • Updated operational scenarios and emission inventories HHRA • Community health risk conclusions
COMMENT 13 Economic considerations cannot override constitutional environmental rights and AMSA's inability to comply with the 500 mg/Nm³ standard is primarily driven by cost considerations	Response ArcelorMittal agrees that Economic considerations cannot override constitutional environmental rights. The application does not seek to elevate economic considerations above environmental protection obligations. Rather, the application seeks an appropriate balance between environmental protection, technical feasibility, socio-economic sustainability and proportionality, consistent with Section 2 of NEMA. The technical and financial feasibility of emission reduction technologies are critical considerations in any impact assessment and consideration of applications such as now before the NAQO. The NEMA is emphatic in this respect. The preamble provides that “the State must respect, protect, promote and fulfil the social, economic and environmental rights of everyone and strive to meet the basic needs of previously disadvantaged communities; ... sustainable development requires the integration of social, economic and environmental factors in the planning, implementation and evaluation of decisions to ensure that development serves present and future generations;...” and further espouses “justifiable economic and social development;” “<i>Sustainable development</i>” is also defined in the NEMA as “the integration of social, economic and environmental factors into ... decision-making so as to ensure that development serves present and future generations;”. These themes are carried through to section 2(3) and 2(4)(i) in respect of economically sustainable development, in balance with the environmental and social impacts. The economic burden (which includes the risk of job losses) must be balanced with environmental considerations. AMSA’s application does just that and clearly illustrates that the social and

Comments received from CER & VEJA	Response
	environmental impact is so negligible that it does not counterweigh against the enormous economic burden. In the matter of Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, 2007 (6) SA 4 (CC) the court held at par 54 as follows: <i>“The concept of sustainable development has received approval in a judgment of the International Court of Justice. This much appears from the judgment of the International Court of Justice in Gabčíkovo-Nagymaros Project (Hungary/Slovakia) where the Court held—</i> <i>‘Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind—for present and future generations—of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development.’</i> Ironically, the CER published an article on currencynews.co.za dated 23 June 2026, which we attach hereto as “Annexure R2”. In this article, the CER reflects on the devastating consequences of the closure of AMSA's Newcastle facilities and the collateral impact on 3 500 jobs as well as the entire town of Newcastle itself. In the article, the CER in fact cites and acknowledges some of the economic realities which serves as the counterpoint for the negligible consequential PM impacts, that being <i>“prolonged pressure from high electricity and logistics costs, weak growth and competition from low-cost imports.”</i> As for the social and economic impacts of closure, the CER correctly sates <i>“For these communities, everything is on the line: families, school fees, grocery bills and the future of the generations they are raising”</i>. Yet, it is the same organisation that would gladly see the potential closure of AMSA Vanderbijlpark based on spurious, emotive and unsupported contentions regarding the negligible effects of PM conversion consequential to this application, should it be approved.

Comments received from CER & VEJA	Response		
	The specialist assessments demonstrate that unacceptable environmental impacts are not expected and that environmental rights are not compromised by the proposed alternative emission limit. The CER itself has publicly made the case as to some of the key economic drivers motivating approval of this application.		
COMMENT 14 If you cannot comply, why not close the kilns?	Because the DR kilns are not a standalone source; they are a critical component of an integrated steelmaking system, and closure would have disproportionate technical, economic and socio-economic consequences without corresponding ambient air quality or health benefits. Report References Motivation Report - Section 4.6		
COMMENT 15 Why is AMSA still referring to "decarbonisation" when projects were cancelled?	Response The revised application no longer relies on the previously proposed Electric Arc Furnace route or future coke battery projects. The current strategy instead focuses on realistic operational optimisation, energy efficiency projects, gas recovery initiatives and emissions reductions that can reasonably be achieved within current financial constraints. The application should therefore not be interpreted as abandoning decarbonisation but rather as revising the pathway toward more financially sustainable implementation.		
Comparison between withdrawn and revised application	Item	Withdrawn 2025 Application	Revised New 2026 Application
	EAF	Included	Cancelled
	New Coke Batteries	Included	Removed
	Gas Cleaning Plant	Included	Removed
	Future SO ₂ reductions	Based on future projects	Based on realistic operational changes
	AIR	Old scenarios	New scenarios
	HHRA	Included	Comprehensive
	Financial assumptions	Different	Updated
Stakeholder Comment If SO ₂ already has National Ambient Air Quality Standards, why was a Health Risk Assessment undertaken?	Response In the present application, SO ₂ is a regulated criteria pollutant with established National Ambient Air Quality Standards in South Africa. Strictly interpreted, the primary legal test applicable to this application is therefore Regulation 12A(c)(i), and not Regulation 12(A)(c)(ii) which relate to circumstances where no ambient air quality standard had been published. The HHRA was therefore not strictly required as a regulatory prerequisite but was voluntarily undertaken as part of a broader duty of care, transparency and precautionary approach.		

Comments received from CER & VEJA	Response
	The HHRA provides additional confidence to the Competent Authority, stakeholders and surrounding communities that the proposed alternative emission limit would not result in a material increase in community health risk.
COMMENT 16 The application does not adequately consider children and vulnerable population groups.	Response ArcelorMittal respectfully disagrees. The AIR specifically identified and assessed sensitive receptors within the study area, including residential areas, schools, healthcare facilities and other locations where vulnerable population groups may be present. The HHRA further evaluated the potential health implications associated with SO₂ exposure at these receptors and concluded that the associated health risks remain insignificantly different from background risks. The specialist studies therefore specifically considered vulnerable receptors as part of the assessment process.
COMMENT 17 Approval of the application will be at odds with international law obligations (paragraphs 50 – 59)	Response The CER's concern for the rights of the public and especially children in context of air pollution is supported by AMSA. None of the laudable objectives in this regard can be faulted. It is with this very view in mind that AMSA has approached the various assessments supporting this application. These rights are in no way disregarded or unduly adversely affected should this application be approved. International law obligations require any complying country to establish a legislative framework which accounts for such obligations. This is what is reflected in the NEM:AQA and specifically section 12A. It serves no purpose to cite general WHO concerns about air quality in an attempt to thwart a regulated application in terms of specific South African legislation that had been tailored, amongst other, specifically in view of South Africa's international law obligations. What the representations seems to suggest is that local entities should not comply with local legislation, but take a judicial leap into international law. It is neither required, lawful nor tenable for any applicant for that matter, to do so. A local statute is presumed to include international obligations as enacted by the legislature. It is simply not competent for an applicant or the decision maker, to create a parallel legal regime by

Comments received from CER & VEJA	Response
	overriding highly specific local legislation in favour of one or other general perceived international obligation. Contrary to the CER's submissions, the judgement in the "Deadly Air" case in fact supports this position implicitly. An administrative decision, made in line with the peremptory prerequisites of the local statute is what is required. No less and no more. Such a decision stands and falls by its consideration of compliance with the application with the statutory requirements and the rationality of the content and recommendations of the summited expert reports. The CER has made no case in its comments that any of these premises are lacking or at fault. We finally note that there is nothing in the reporting of the Special Rapporteur or in the observations of any of the authors mentioned in the footnotes to these comments that relate to-, let alone criticise, the submitted specialist studies. Accordingly, giving any credence to these highly generalised observations as dispositive of any aspect these studies will be in gross violation of the basic tenets of administrative law.
COMMENT 18 Applications under section 12A tantamount to exemption from compliance (par 41 to 43 and 63)	Response The comment is incorrect in both logic and law. A properly motivated and granted application is not "tantamount to exemption from compliance". Once granted, such an authorisation is, by definition, "compliance". The CER also states at par 63 of their submissions that a section 12A application is akin to an impermissible exemption <u>under section 59(1) as read with section 9(c)</u>. This is not true for at least two reasons. Firstly, where an Act provides for two modes of application for relief, either mode is available. Secondly, the preclusion of exemptions from section 9 (whether for purposes of Section 9(c) or otherwise) bears no relevance to section 21, which is the provision in terms of which the standards pertinent to this application were published. The CER also attempts to establish a statutory link between sections 9(c) and 21, which link does not exist. Section 21 makes no reference to section 9 and there is thus no connection between the provisions.

Comments received from CER & VEJA	Response
	Further, the exemption limitation referenced under section 59(1)(a) bears no relevance to section 21 itself and certainly not anything done in terms of section 21.
COMMENT 19 The NAQO should await the outcome of pending litigation and if not, this will render the VEJA's relief sought in a High Court application moot (par 65)	Response The CER apparently seeks to scupper an application submitted in accordance with ruling law as well as the principles of administrative law established by our courts, on the basis that it may affect their ability to proceed with extraneous court action. The court proceedings referred to by the CER pertains to an already lapsed administrative decision. There is nothing that may be submitted to- or adjudicated on by the court in that pending matter that can conceivably be rendered moot or otherwise affected by the processing of this (or any other) administrative application, irrespective of the outcome. This comment in fact requests the NAQO to engage in unlawful conduct because the NAQO is lawfully not at liberty to delay administrative presses on the basis of a speculative future court ruling.
COMMENT 20 AMSA does not meet the prerequisites for an alternative standard due to PM conversion (par 66 to 69)	Response We reiterate that the CER's submissions reflect a critical misrepresentation of the wording and logic of the Minimum Emission Standards. The pollutant which is the subject of this application is SO₂. The qualifying requirement (in this instance) for the availability of Section 12A, is the proviso in section 12A(c)(i). That is, that there is material compliance with the National Ambient Air Quality Standards (NAAQS) in the area for SO₂. This compliance was illustrated. What the CER seeks to do, is to introduce elements into this proviso, which simply does not exist, that being, an imaginary prerequisite for NAAQS compliance in respect of PM into section 12A(c)(i). This recommended approach is both untenable and unlawful. It is settled law that the clear language of a statute must be abided by. It is not for either the public or the administration to read words or phrases into a statute which are simply not there. The CER may wish that PM₁₀ and PM_{2.5} NAAQS compliance were a prerequisite for an application pertaining to SO₂, but it is not.

Comments received from CER & VEJA	Response
	The CER's submission that NAAQS in respect of PM is a prerequisite to the right to make an application under section 12A in respect of SO2 is based on unsupported assumptions, followed by unlawful leaps of abstraction, as follows: • Firstly, the CER assumes that the legislature was completely oblivious of the conversion of SO2 to PM in setting the NAAQS for SO2. This assumption is entirely unsubstantiated. • If the logic or methodology for establishing the NAAQS for SO2 in relation to PM conversion stands to be challenged (for which there is no evidence), the CER must do so by legal review of the statute. It cannot do so in comments to an administrative application. • This notwithstanding, the CER implies not only that this assumption be made out of hand, but suggests further that the NAQO should proceed to infer that the plain wording of section 12A(c)(i), as it stands, is therefore incorrect. • The submission then makes a further leap by proposing that the NAQO must not only ignore the clear wording of the statute, but supplant the requirements of section (12A)(a)(i) with something entirely different. This proposition does not hold up in law. The above notwithstanding, the proposition that AMSA "ignored" particulate matter in its submission and assessments is plainly untrue as we have already dealt with above.
<u>COMMENT 21</u> CER claims AMSA's SO2 emissions are "likely associated" with significant excess premature mortality in the Highveld because of the conversion of these emissions into PM	This speculative averment is entirely unsupported by any proper consideration or commentary on the assessments conducted by notable and accredited experts as submitted. In fact, the CER does not make a single reference to the findings in the HIA, the findings of which directly contradict all of the assumptions and unsupported conclusions throughout these submissions. The indicated references in "support" of these conclusions are generalised studies on the effect of "air pollution" and benefits of the reduction of exposure to PM. None of these studies stand in contradiction of the site specific and contextual assessments performed by AMSA's notable experts. We further note that this theme is familiar with the CER and its clients. By all indications, AMSA's specialised studies are not scrutinised and properly commented on. Instead, repeated references are made to generalised external studies and papers that have no bearing on the necessary contextual detail which would be required to inform proper contextual comments.
COMMENT 22	

Comments received from CER & VEJA	Response
Licensing authorities (typically municipalities) are not allowed to set emission limits above the MES and that this limitation is designed to ensure uniformity irrespective of competence (paragraph 40)	This submission misses the very point of section 12A and is fundamentally flawed both in law and logic. It is exactly for the purpose of departure from the narrow MES limits that section 12A was introduced. That is, in order for the NAQO (not municipalities) to consider applications such as these. If approved, the licensing authority is at liberty to specify emission limits as motivated to and approved by the NAQO in an AEL. There can be no logic to a claim that the emission levels are set by the municipality if the application for alternative standards are made to the NAQO who must approve or disallow that application. The licence is issued in line with the approval.
COMMENT 23 <i>"... the AIR does not illustrate that relaxing the 500 mg/Nm³ standard ... would lead to compliance with air quality regulations"</i>	This statement in paragraph 97 of the CER comments makes no contextual sense. It is the function of the HRA as read with the AIR to illustrate that the relaxation is acceptable from a health impact perspective. If the AQO agrees with this conclusion and approves the alternative standard application the relaxation inherently complies with the relevant legislation.

OVERALL CONCLUSION

ArcelorMittal respectfully submits that the revised 2026 application addresses the requirements of Section 12A and provides a sound technical, legal, environmental and socio-economic motivation.

The specialist assessments demonstrate that:

- no material exceedances of SO₂ NAAQS are expected;
- no material increase in community health risks is expected;
- meaningful works-wide SO₂ reductions can still be achieved;
- the application is based on realistic operational assumptions;
- significant socio-economic benefits are associated with continued operation of the Vanderbijlpark Works.

ArcelorMittal therefore respectfully requests that the National Air Quality Officer consider the application favourably.



Centre for Environmental Rights

Advancing Environmental Rights in South Africa

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3 April 2025

Dear Sirs/Mesdames

OBJECTIONS: ARCELORMITTAL SOUTH AFRICA APPLICATION FOR ALTERNATIVE SO₂ MINIMUM EMISSION STANDARDS LIMIT AT DIRECT REDUCTION KILNS 1-6

Introduction

1. We write to you on behalf of our clients; groundWork and Vaal Environmental Justice Alliance (“**VEJA**”). This correspondence serves as our engagement in the public participation process of the application for alternative SO₂ Emission Standards at the direct reduction kilns (“**DR Kilns**”) of ArcelorMittal South Africa (“**AMSA**”).
2. Our objections are based on the Motivation Report and other attached documents made available on 26 February 2025 and will demonstrate that granting of a further alternative minimum emissions standard to AMSA will adversely impact the environment and the community of the VTAPA, particularly children. We will further demonstrate that granting the alternative minimum emission standard would be incompatible with air quality laws and regulations.
3. VEJA is a coalition of five environmental organisations with the common goal of establishing the realisation of environmental justice in the Vaal Triangle. VEJA achieves this through educational advocacy, stakeholder engagements and litigation.¹ groundWork is a non-profit organisation that focuses its work primarily on climate change action and environmental justice guided by section 24 of Constitution. groundWork prioritises vulnerable

¹Vaal Environmental Justice Alliance website, accessed at <https://veja.org.za/about.html>

community empowerment through various campaigns and advocacy work.² VEJA and groundWork alike, are invested in ensuring that industrial activities in the Vaal Triangle do not undermine the fundamental human rights of individuals residing in and around the Vaal Triangle.

4. AMSA is a steel producing company, which is a part of the larger worldwide ArcelorMittal group. AMSA operates a steel plant in the Vaal Triangle while also having its headquarters in Vanderbijlpark within the Vaal Triangle.³
5. Our clients submit that the application for alternative SO₂ limit minimum emission standard fails to meet the requirements of the National Environmental Management: Air Quality Act⁴ ("**Air Quality Act**") , the National Framework and the National Ambient Air Quality Standards ("**NAAQS**") and on that basis our clients object to the granting of the application to AMSA. Below we set out the detail on which some of our clients' objections are based.
6. The following sections will be addressed in this objection, namely:
 - 6.1. The factual and legal context surrounding AMSA's application;
 - 6.2. The legal framework surrounding the Minimum Emissions Standards;
 - 6.3. The correct interpretation of paragraph 12A of the National Framework;
 - 6.4. The reasons AMSA does not meet the requirements for an alternative SO₂ emission limit; and
 - 6.5. Deficiencies in the Health Risk Assessment and the Atmospheric Impact Report.
7. This application is one of many applications made by AMSA throughout the years. The most recent application, the present application excluded, was made on 29 March 2019, in respect of it's Coke battery 4 – 9 and DR Kilns 3-6. These standards were subsequently granted on 23 March 2020.⁵ Despite the granting of these alternative emission standards, AMSA has made yet another application. In this application, AMSA requests an alternative SO₂ emission standard at DR Kiln 1 – 6. This indicates that at DR Kiln 3-6, since 2020, AMSA has failed to reduce its SO₂ emissions to the alternative standards they were granted in 2020.

BACKGROUND AND LEGAL FRAMEWORK

8. In considering AMSA's application, it is necessary to consider both the factual and legal context within which this application is made.
9. AMSA's Vanderbijlpark Works is based in the Vaal Triangle, an area that is considered a pollution "hotspot", due to the ambient air quality levels falling far below the required NAAQS and the area requiring specific air quality management action to rectify the high levels of pollution. This state of affairs resulted in the Minister declaring the Vaal Triangle a national priority area in 2006, which required active steps to improve the ambient air quality.⁶ The declared area has since been formally termed the Vaal Triangle Airshed Priority Area ("**VTAPA**"), as the first declared national priority area in South Africa.⁷

² groundWork website, accessed at <https://groundwork.org.za/about-us/>

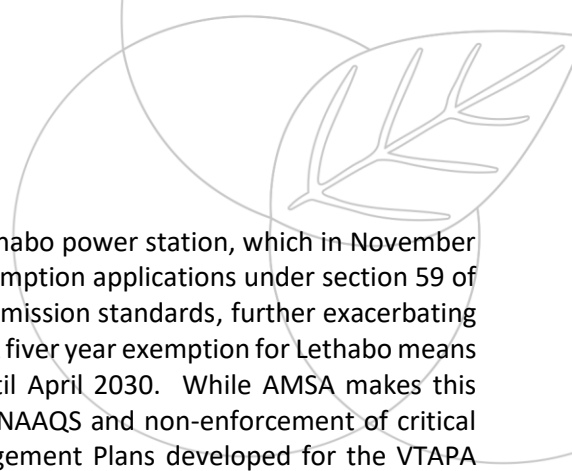
³ ArcelorMittal South Africa website, accessed at <https://www.arcelormittalsa.com/Whoweare/Ourcompany.aspx>

⁴ Act 39 of 2004.

⁵ Zantow Environmental Consulting Services CC, 'Application for Alternative Emission Standards at the DR Kilns in terms of Regulation 12A of Government Notice 893 promulgated in terms of the National Environmental Management: Air Quality Act (No 39 of 2004) ArcelorMittal South Africa Vanderbijlpark Works' accessed at, [ArcelorMittal S12A Application - Dropbox](#)

⁶ Section 18 of the Air Quality Act.

⁷ Government Gazette Notice No. 365 of 21 April 2006.

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10. The VTAPA is not only home to AMSA, but it is also home to Eskom's Lethabo power station, which in November of 2024, amongst many other Eskom coal-fired power stations made exemption applications under section 59 of the Air Quality Act due to Eskom's failure to comply with the minimum emission standards, further exacerbating the high levels of pollution. Lethabo will continue to operate until 2030. A five year exemption for Lethabo means that it will continue to have an impact on the health of residents. until April 2030. While AMSA makes this application and a history of non-compliance with applicable, legislated NAAQS and non-enforcement of critical tools to realise air quality standards, undermine the Air Quality Management Plans developed for the VTAPA resulting in poor ambient air quality in the VTAPA which continues to pose a threat to the health of the residents.
 11. AMSA has a long and established history of non-compliance with various environmental legislation, including the Air Quality Act. The Department has been aware of AMSA's non-compliance with emission standards and has repeatedly listed the non-compliance in the National Environmental Compliance and Enforcement Report ("NECER"). The NECER 2016-2017 report indicates that there have been non-compliances with the AEL conditions, which include exceedances of particulate matter ("PM"), this particularly relevant, in respect of AMSA's Health Risk Assessment Report, as well as its Atmospheric Impact Report.
 12. AMSA's Motivation Report, explains that previous methods employed to reduce SO₂ emissions, namely, the use of cleaner low Sulphur coal and the carbon capture and utilization concept technology have proven unsuccessful.⁸ AMSA proposes to adopt a decarbonization strategy – which on its own admission will never be able to comply with the SO₂ new plant standard emission limit of 500 mg/Nm³ while remaining economically viable. AMSA has had ample time within which to comply with the timeframes, yet legal mechanisms have not been enforced against it.

The Legal Framework Concerning the Minimum Emissions Standards

Section 24 of the Constitution

13. Section 24 of the Constitution provides that:

"Everyone has the right:

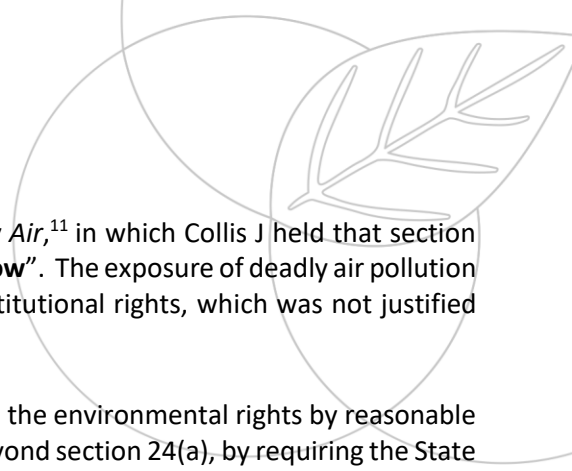
- (a) to an environment that is not harmful to their health or well-being; and*
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:*
 - (i) prevent pollution and ecological degradation;*
 - (ii) promote conservation; and*
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."*

14. Section 24(a) entrenches the fundamental, immediately realisable and unqualified right to an environment that is not harmful to health or well-being.⁹
15. In *Vaal River*,¹⁰ the Constitutional Court endorsed the unqualified reading of section 24(a) as a right which is distinct from the qualified socio-economic rights. The Court held that "[u]nlike socio-economic rights . . . the right to an environment that is not harmful to health or well-being . . . [is] not subject to progressive realisation in accordance with reasonable measures, which are taken within the State's available resources." (Emphasis added)

⁸ Ibid

⁹ *Eskom Holdings SOC Ltd v Vaal River Development Association (Pty) Ltd and Others* 2023 (5) BCLR 527 (CC) at para 295; (*Vaal River*); *Trustees for the time being of groundWork Trust and Another v Minister of Environmental Affairs and Others* [2022] ZAGPPHC 208 at paras 37-9 (*Deadly Air*); *HTF Developers (Pty) Ltd v Minister of Environmental Affairs* 2006 (5) SA 512 (T) at para 17.

¹⁰ Ibid at para 295.

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16. The *Vaal River* judgment reinforces the High Court’s judgment in *Deadly Air*,¹¹ in which Collis J held that section 24(a) is an unqualified right to be free from harmful pollution “**here and now**”. The exposure of deadly air pollution to the residents of the Highveld was declared to be a limitation of constitutional rights, which was not justified under section 36 of the Constitution.¹²
17. Section 24(b) further imposes a further obligation on the State “to secure the environmental rights by reasonable and legislative and other measures.”¹³ Section 24(b) accordingly looks beyond section 24(a), by requiring the State to take reasonable steps to protect the environment even where human health and well-being are not immediately threatened. It acknowledges that environmental protection is not solely about addressing immediate harms, but is also intended to exercise long-term custodianship and care for the environment.

Section 28(2) of the Constitution

18. In terms of section 28(2) of the Constitution the right of a child to have their best interests of paramount importance in matters affecting them is a constitutional right that is enjoyed by every child in South Africa. It provides in this regard, that “*a child’s best interests are of paramount importance in every matter concerning the child*”.
19. This right is equally applicable within the context of environmental decisions. This has been confirmed by the High Court which held that environmental decisions need to demonstrate adequate and appropriate consideration of the provisions of section 24 and section 28 of the Constitution.¹⁴

The National Environmental Management Act

20. The National Environmental Management Act (“**NEMA**”),¹⁵ is South Africa’s framework environmental legislation.
21. Section 2 of NEMA sets out a series of binding principles that must inform the interpretation and application of all environmental legislation. These include the principle that development must be socially, environmentally and economically sustainable.¹⁶ A commitment to sustainable development requires a consideration of all relevant factors, including:
- 21.1. that the disturbance of ecosystems and loss of biological diversity must be avoided, failing which, minimised and remedied;¹⁷
 - 21.2. that a risk-averse and cautious approach must be applied, accounting for the limits of current knowledge about the consequences of decisions and actions (known as the ‘precautionary principle’);¹⁸ and
 - 21.3. that negative impacts on the environment and people’s environmental rights must be anticipated and prevented, failing which minimised and remedied (known as the ‘preventative principle’).¹⁹

¹¹ *Deadly Air* at para 156.

¹² *Ibid* at para 175.

¹³ *HTF Developers* at para 17.

¹⁴ *African Climate Alliance and Others v the Minister of Mineral Resources and Energy and Others* (56907/2012) [2024] ZAGPPHC 1271 at para 24.

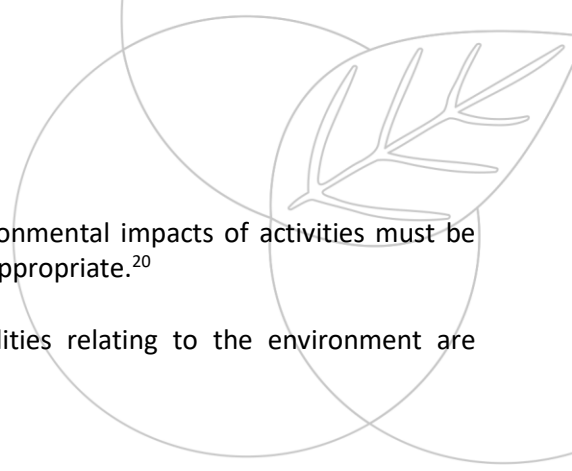
¹⁵ 107 of 1998.

¹⁶ Section 2(3) of NEMA.

¹⁷ Section 2(4)(a)(i) of NEMA.

¹⁸ Section 2(4)(a)(vii) of NEMA.

¹⁹ Section 2(4)(a)(viii) of NEMA.

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22. Another guiding principle requires that the social, economic and environmental impacts of activities must be considered, assessed and evaluated, and decisions must be accordingly appropriate.²⁰
23. A further principle requires that global and international responsibilities relating to the environment are discharged in the national interest.²¹

The Air Quality Act

24. The Air Quality Act is subsidiary environmental legislation which was enacted under NEMA with the express aim of addressing air pollution and protecting the section 24 constitutional rights.
25. In its preamble, the Air Quality Act recognises, amongst other things, that the quality of air in many areas of South Africa is not conducive to a healthy environment for the people living in those areas, and that *“minimisation of pollution through vigorous control, cleaner technologies and cleaner production practices is key to ensuring that air quality is improved.”*
26. Section 2 of the Air Quality Act, provides as follows:

“The object of this Act is –

(a) To protect the environment by providing reasonable measures for –

- (i) the protection and enhancement of the quality of air in the Republic;*
- (ii) the prevention of air pollution and ecological degradation; and*
- (iii) securing ecologically sustainable development while promoting justifiable economic and social development; and*

(b) generally to give effect to section 24(b) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.”

27. Section 3 further imposes a “general duty on the state”, providing, *inter alia*, that “[i]n fulfilling the rights contained in section 24 of the Constitution, the State . . . through the organs of state applying this Act, must seek to protect and enhance the quality of air in the Republic.”
28. The Air Quality Act establishes several mechanisms through which these aims are to be achieved, including the National Framework, NAAQS, atmospheric emissions licences (“**AEL**”), and the declaration of Priority Areas.

The National Framework

29. Section 7 of the Air Quality Act provides for the creation of a National Framework which sets out binding norms and standards for achieving the objectives of the Act. The current National Framework – the 2017 National Framework – was published on 26 October 2018.
30. Section 7(3) and 7(4) of the Air Quality Act provide that:

“(3) The national framework –

(a) binds all organs of state in all spheres of government; and

(b) may assign and delineate responsibilities for the implementation of this Act amongst

- (i) the different spheres of government; and*
- (ii) different organs of state.*

²⁰ Section 2(4)(b) of NEMA.

²¹ Section 2(4)(n) of NEMA.

(4) *An organ of state must give effect to the national framework when exercising a power or performing a duty in terms of this Act or any other legislation regulating air quality management.”*

31. During the mandatory five-year review cycles in 2007, 2012 and 2017, respectively, a number of specific mechanisms and national norms and standards were promulgated in terms of the National Framework and the Air Quality Act. These include NAAQS and List of Activities which “result in atmospheric emissions and which the Minister or MEC reasonably believes have or may have a significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage (**“the List of Activities”**)”.

National Ambient Air Quality Standards

32. In terms of section 9 of the Air Quality Act, the Minister must identify substances or mixtures of substances in ambient air which, through ambient concentrations, bioaccumulation, deposition or in any other way, present a threat to health, well-being or the environment. Furthermore, the Minister must, in respect of each of those substances or mixtures of substances, establish national standards for ambient air quality, including the permissible amount or concentration of each such substance or mixture of substances in ambient air.
33. National Standards have been set for eight pollutants: nitrogen dioxide (**“NO₂”**), ozone (**“O₃”**), sulphur dioxide (**“SO₂”**), carbon monoxide (**“CO”**), benzene (**“C₆H₆”**), lead (**“Pb”**), particulate matter – particles with aerodynamic diameter less than ten micron metres (**“PM₁₀”**),²² and particulate matter – particles with aerodynamic diameter less than two-and-a-half micron metres (**“PM_{2.5}”**).²³
34. For most pollutants, including PM₁₀, PM_{2.5}, and SO₂, NAAQS are set for both shorter term averaging periods (24 hours or less) and annual periods, because these pollutants can significantly harm human health with short-term exposures. In other words, even if ambient air is compliant with the annual averaging period standard for a pollutant, it can be non-compliant with the short-term standard.

List of Activities

35. In terms of section 21(1)(a) of the Air Quality Act, the Minister is required to publish, by notice in the Gazette, the List of Activities, specifically which activities require an AEL.
36. Anyone engaging in these listed activities is required to obtain an AEL, issued under Chapter 5 of the Air Quality Act. It is an offence to conduct any of the listed activities without a licence.²⁴
37. The List of Activities must also establish MES in respect of a substance or mixture of substances resulting from a listed activity identified in the notice. The MES should state the permissible amount, volume, emission rate or concentration of that substance or mixture of substances that may be emitted, and the manner in which measurements of such emissions must be carried out.
38. The purpose of the MES is to set the bare minimum level of regulation for emissions of identified pollutants. Licensing authorities – typically municipalities – may set emission limits that are more stringent than the MES, but **they may not allow emissions above the MES** [emphasis added]. This is designed to ensure a basic, uniform level of regulation, no matter the competence or capacity of the licensing authority.
39. The Minister published the first List of Activities, with associated MES, in March of 2010 following a multi-year, multi-stakeholder process. It required so-called “existing plants” to comply with one set of MES by April 2015

²² GN 1210 in GG 32816 of 24 December 2009.

²³ GN 486 in GG 35463 of 29 June 2012.

²⁴ Section 22 of the Air Quality Act.

(existing plant MES), and with stricter MES by April 2020 (new plant MES). Therefore, older plants were given a lead period of 5 years to comply with the more lenient 2015 standard, and a further 5 years to comply with the stricter standard by April 2020.

40. The List of Activities afforded plants an opportunity to apply to the National Air Quality Officer (“NAQO”) for a postponement of compliance with the MES. The NAQO could - with the concurrence of the municipal licensing authority which issues the company’s AEL – extend each deadline by a further five years if certain preconditions are met.
41. This rolling postponement mechanism has been used by largescale polluters including AMSA to achieve what is in effect an exemption from compliance.
42. In October 2018, the then Minister introduced amendments to the List of Activities, along the lines proposed in the 2017 National Framework. The 2018 amendments to the List of Activities also included a new provision, paragraph 12A. Paragraph 12A, makes provision for an existing plant to apply for an alternative emission limit in respect of a particular pollutant or pollutants if a number of preconditions are satisfied.

Priority Areas and Air Quality Management Plans

43. The Air Quality Act also provides for the designation of Priority Areas to ensure focused interventions across municipal and provincial boundaries.
44. Section 18 provides the Minister or relevant provincial MECs with the power to declare priority areas with the aim of taking steps to address the ambient air pollution so that there is compliance with NAAQS. The declaration may be withdrawn if the area is in compliance with NAAQS for at least two years.²⁵
45. The Air Quality Act requires the development of a priority area Air Quality Management Plan (“AQMP”), aimed at co-ordinating air quality management and addressing air quality issues.²⁶ Section 20 further makes provision for regulations to implement and enforce priority area air quality management plans.
46. The first generation AQMP of the VTAPA was published on 28 May 2009 followed by a mid-term review of it in 2013. Over a decade later, the initial AQMP was followed by the second generation AQMP of the VTAP published on June 2020. The Draft baseline assessment report of the second generation AQMP made comparisons of the Air Quality in VTAPA between 2009, 2013 and 2018. This assessment revealed that while there had been overall decreases in PM10 and NOX industrial emissions in VTAPA during this time, there had actually been an increase in SO2 industrial emissions. Furthermore, the results of a VTAPA health study conducted in 2013 – 2014 noted that air pollution in the VTAPA may be affecting child health.²⁷ Based on these and other findings, it has since been reported and concluded that since the establishment of the first generation AQMP of the VTAPA, there has not been a significant improvement in the air quality within this priority area.²⁸ These circumstances are relevant to the current application for alternative standards of SO2 emissions by AMSA.

International law obligations

²⁵ Section 18(5) of the Air Quality Act.

²⁶ Section 19 of the Air Quality Act.

²⁷ The Second Generation Vaal Triangle Airshed Priority Area Air Quality Management Plan: Draft Baseline Assessment Report, accessed at file:///C:/Users/PettaviaMadibana/Downloads/PETTAVIA%202025/vtapa%20second%20generation%20aqmp_draft%20baseline%20assessment%20report_public%20comment.pdf

²⁸ Cheledi Tshela, Caradee Y. Wright ‘15 Years after the National Environmental Management Air Quality Act: Is legislation failing to reduce air pollution in South Africa?’ (2019) accessed at file:///C:/Users/PettaviaMadibana/Downloads/PETTAVIA%202025/vtapa%20second%20generation%20aqmp_draft%20baseline%20assessment%20report_public%20comment.pdf

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47. The various obligations outlined above must be understood in light of South Africa's international law commitments, including the emerging international law right to a safe and healthy environment.²⁹
48. In a report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and waste, Marcos Orellana, noted that South Africa's "legislative framework offers a strong basis for the protection of the rights to life, health and a healthy environment."³⁰ However, this has been undermined by "postponements of or exemptions from compliance" which "have been extended to powerful corporate actors under the guise of economic development, job creation or security."³¹
49. The Special Rapporteur emphasised that not only are South Africa's air quality standards comparatively lenient, but the granting of exemptions and/or extensions also renders those standards of limited value.³²
50. Accordingly, the Special Rapporteur offered as his first recommendation under the "Air pollution and just transition" section, the recommendation that South Africa "[p]rohibit rolling postponements or exemptions of compliance with minimum emission standards."³³
51. Air pollution is the most lethal environmental challenge worldwide, causing a staggering 7 million premature deaths per year.³⁴ States have an obligation to respect and protect the rights of people from any real or potential environmental harm.³⁵ Children, in particular, are one of the most vulnerable groups to environmental harm, including and particularly air pollution, and are deserving of even greater protection by States.³⁶
52. In terms of General Comment 26 on the rights of children and the environment, the United Nation's Committee for the Rights of the Child ("CRC"), addressed the adverse effects of environmental degradation on the enjoyment of children's rights.
53. The General Comment affirms that there is a duty on States to consider the best interests of children in all significant environmental decisions:

"Environmental decisions generally concern children, and the best interests of the child shall be a primary consideration in the adoption and implementation of environmental decisions, including laws, regulations, policies, standards, guidelines, plans, strategies, budgets, international agreements and the provision of development assistance. Where an environmental decision may have a significant impact on children, conducting a more detailed procedure to assess and determine children's best interests that provides opportunities for their effective and meaningful participation, is appropriate."

²⁹ *Earthlife Africa v Minister of Environmental Affairs and Others* (2017) 2 All SA 519 (GP).

³⁰ Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Report on South Africa Visit, 31 July to 11 August 2023, 17 July 2024, at para 17.

³¹ *Ibid* at para 18.

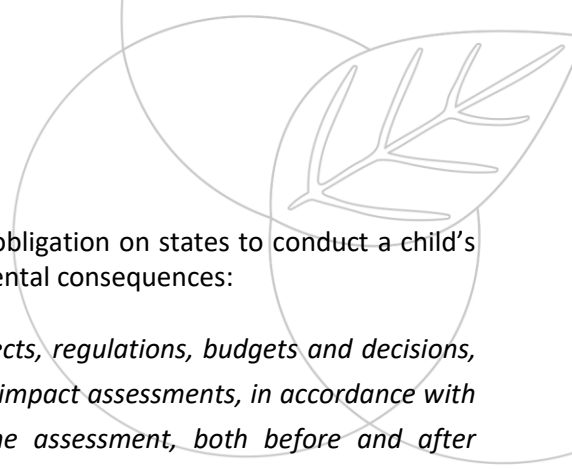
³² *Ibid* at para 107.

³³ *Ibid* at para C.

³⁴ World Health Organization, Health consequences of air pollution on populations, 25 June 2024, <https://www.who.int/news/item/25-06-2024-what-are-health-consequences-of-air-pollution-on-populations>; World Health Organization, 7 million premature deaths annually linked to air pollution, 25 March 2014, <https://www.who.int/news/item/25-03-2014-7-million-premature-deaths-annually-linked-to-air-pollution>.

³⁵ Office of the UN High Commissioner for Human Rights (OHCHR) '2016 Day of General Discussion: Children's Rights and the Environment' 23 September 2016. Available at <https://www.ohchr.org/en/events/days-general-discussion-dgd/2016/2016-day-general-discussion-childrens-rights-and> (last accessed on 1 April 2025).

³⁶ *Ibid*.

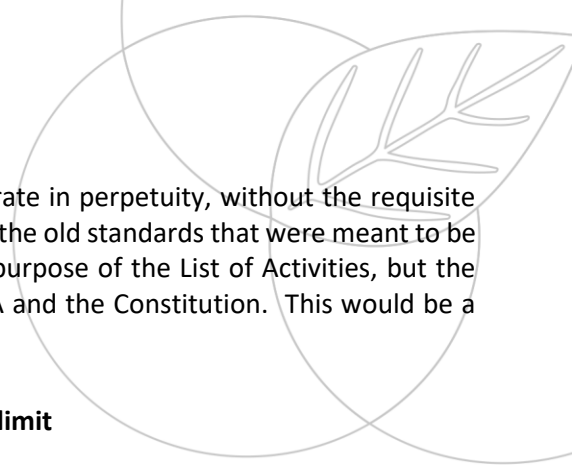
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54. To that end, the General Comment emphasises that there is a specific obligation on states to conduct a child's rights impact assessment where decisions will have significant environmental consequences:

“All proposed environment-related legislation, policies, projects, regulations, budgets and decisions, and those already in force, require vigorous children’s rights impact assessments, in accordance with article 3(1) of the Convention. States should require the assessment, both before and after implementation, of the possible direct and indirect impact on the environment and climate, including the transboundary, cumulative, and both production and consumption effects, on the enjoyment of children’s rights.”

55. In *Deadly Air*, the Court held that “the principle of sustainable development further requires that measures put in place to achieve economic development should not sacrifice the environment and human life and well-being”. AMSA proposes the prioritisation of economic growth at the expense of the environment, human health and human rights.
56. It is vital that in order to give effect to the right to healthy environment, States fulfil their obligation to regulate. In other words, States must actually create, implement, and enforce laws, policies, regulations, and programmes designed to protect the components of a healthy and safe environment, including clean air. It is our clients’ submission that granting AMSA’s alternative SO₂ minimum emission limit is a breach of the State’s obligation. We elaborate on this point further in the section below.

The correct interpretation of the Listed Activities and the MES provisions

57. In terms of section 9 and 10 of the listed Activities, existing plants are allowed compliance with weaker more lenient limits, called the “existing plant standards” which provide for a higher level of allowed emissions, from 1 April 2015. Such existing plants were then required to comply with “new plant standards” which provide for a stricter standard (lower threshold of allowed emissions) by 1 April 2020. It is worth noting that the more lenient the emission standards, the more is allowed, and that with stricter standards, less pollution will result.
58. The purpose of the different limits and timeframes is to allow for older plants to have time to make headway and gain ground with compliance with air pollution standards provided for in the Air Quality Act. This can be done through the upgrading of facilities with abatement technologies to meet the stricter air pollution standards over time.
59. All three of the above-mentioned provisions must be read together to establish the most correct interpretation of the allowance provided for by Paragraph 12A mentioned above. The wording of paragraph 12A itself makes it clear that the allowance it provides is meant for the eventual but merely delayed compliance with the Minimum Emission Standards established for new plants. On proper reading of the Paragraph 12A, in line with the Constitution, the Air Quality Act and the National Framework, this provision was not intended to be an avenue for permanent non-compliance with the law.
60. Interpreting paragraph 12A to allow for alternative limits against the existing plant standards and for any period beyond 31 March 2025, would be a retrogressive application of the law. This interpretation would allow for any emissions, for any length of time, which is essentially, an exemption under section 59(1), and section 9(c) of the Air Quality Act which is impermissible. Weakening emissions in this way would mean that polluters would not have to comply with the MES, and NAAQS would never be complied with.

- 
61. To allow for polluters to be able to apply for alternative limits that operate in perpetuity, without the requisite timeframes for compliance; or to allow for alternative limits weaker than the old standards that were meant to be in compliance already in 2015, would make a mockery of not only the purpose of the List of Activities, but the entire air quality management legislative framework, and in turn, NEMA and the Constitution. This would be a blatant disregard of the purpose of the legislative framework.

AMSA does not meet the requirements for an alternative SO₂ emission limit

62. In terms of section of Paragraph 12A(c) *“the National Air Quality Officer, after consultation with the Licensing Authority, may grant an alternative emission limit or emission load if: (i) there is material compliance with the national ambient air quality standards in the area for pollutant or pollutants applied for; or (ii) the Atmospheric Impact Report does not show a material increased health risk where there is no ambient air quality standard.”*
63. The State of the Air Report presented by the Department of Forestry, Fisheries and the Environment at the 2022 Air Quality Lekgotla indicates that there is non-compliance with NAAQS for PM₁₀ and PM_{2.5} which can be converted from SO₂. This indicated that there is no material compliance with the NAAQS in the VTAPA. Ambient air in the area should be in compliance with the NAAQS in order to grant alternative limits. AMSA’s Atmospheric Impact Report considers the level of compliance with NAAQS but fails to consider the conversion of SO₂ to PM_{2.5} which is currently not in compliance with NAAQS.
64. Furthermore, the deficiencies in the Atmospheric Impact and Health Risk Assessment Report result in the reports not providing an accurate reflection of the increased health risk that will be occasioned by the granting of the alternative SO₂ limit. It is for these reasons that our clients submit that the requirements for an alternative SO₂ limit have not been satisfied and the alternative limit should accordingly be denied. The deficiencies in the Atmospheric Impact and the Health Risk Assessment Report are elaborated upon below.

Deficiencies in the Atmospheric Impact and Health Risk Assessment Reports

65. Expert reviews of the Atmospheric Impact and Health Risk Assessment Reports, identify significant deficiencies. The deficiencies are detailed in the section below.

Atmospheric Impact Report

66. Granting the requested alternative SO₂ emission limits would result in a significant increase of over 5,000 additional tons of SO₂ emissions per year, leading to higher levels of PM_{2.5} due to chemical conversion. This would further degrade air quality in the VTAPA, where PM₁₀ and PM_{2.5} levels already exceed NAAQS. The Atmospheric Impact Report does not adequately assess the impact of these emissions on particulate matter levels, as it relies on the AERMOD modelling system, which does not account for SO₂ transformation into sulfate aerosols. More advanced models such as CMAQ or CAMx should have been used to accurately evaluate secondary PM_{2.5} formation.
67. Furthermore, existing SO₂ concentrations near AMSA frequently exceed NAAQS limits, and increasing emissions through alternative limits would likely worsen these exceedances. Even the slight reduction in SO₂ emissions projected under Scenario 4 (by approximately 1,460 tons per year) is insufficient to bring air quality into compliance. The justification for the alternative limits is flawed, as the AIR does not demonstrate that relaxing the 500 mg/Nm³ standard is necessary or that it would lead to compliance with air quality regulations. Given the already critical pollution levels in the VTAPA, granting these alternative limits would likely exacerbate non-compliance rather than improve conditions.

Health Risk Assessment Report

68. A review of these reports conducted by the Centre for Research on Energy and Clean Air, identifies several methodological flaws that significantly underestimate the health risks. One major omission is the failure to assess the health impact of secondary pollutants, particularly sulfate PM_{2.5}, which poses severe respiratory and cardiovascular health risks. Furthermore, the geographical coverage of AMSA's assessment is insufficient, only considering a 10 km x 10 km area, whereas air pollutants can travel hundreds of kilometers, affecting a much larger population. The omission of mercury emissions in AMSA's environmental impact reports is another significant gap, as weaker SO₂ controls would likely lead to increased mercury emissions, which have serious neurological and cardiovascular health consequences.
69. The Atmospheric Impact Report estimates that raising SO₂ limits could result in an annual emission increase of 8,413 to 15,595 tons per annum. Previous studies suggest that such an increase would lead to substantial public health consequences, including thousands of excess deaths per year due to air pollution. Moreover, AMSA's failure to consider long-range pollution dispersion and its health effects further undermines the reliability of its findings. International studies have shown that sulfate PM_{2.5} is significantly more hazardous than SO₂ alone, with exposure leading to a significantly higher risk of mortality. Furthermore, weakening SO₂ emissions controls contradicts South Africa's MES and international best practices, which recommend the use of wet or dry scrubbers to reduce SO₂ emissions by 90% or more. Granting AMSA's application could have severe consequences for air quality, public health, and compliance with international environmental commitments. A copy of CREA's review of AMSA's Atmospheric Impact Report as well as its Health Risk Assessment is attached as "**Annexure A**".
70. These health impacts are especially pronounced where children and the elderly are concerned. AMSA's Motivation Report identifies at least 24 schools and old age homes in close proximity to AMSA's Vanderbijlpark Works.

Conclusion

71. It is our clients' submission, that on a correct interpretation, Paragraph 12A are not permissible in law. Even, in the event that is found that they are permissible, AMSA does not meet the requirements for the granting of an alternative SO₂ limit for reasons discussed above and accordingly its application should be refused.

Yours faithfully

CENTRE FOR ENVIRONMENTAL RIGHTS

per:

: 

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MEMORANDUM

Responses to CER Comments on application by ArcelorMittal South Africa application for alternative standard at Direct Reduction Kilns

Prepared for ArcelorMittal South Africa Pty Ltd

17 April 2025

Conveyancers, Notaries & Trade Mark Agents

Directors: GP van der Merwe (Chairman), SM Jacobs, CA Wessels, N Caine, J Albertse, S van der Merwe, KM Greig, JA Erasmus, JD van Broekhuizen, CN Groenewald, AS van Niekerk, L Gani, KC Cameron, JC Jansen van Rensburg, JB Mayaba, J Naidoo, A Abarder, K Zybrands, KM Wykes, FA Dreyer, T Booyse, DT Vraagom, RM Masolo, K Sehanka, MGK Moshoeshoe, K Tumba Diong

Consultants: DE Pfaff, T Charters, NA Janse van Rensburg, KF Ussuph, TM Nwedamutsu, JF de Beer

Senior Associates: M Naude, N Ramcharan, A Dhanuk, MI Dube, U Ramaifo, R Chinner, RJ Schoeman, T Maritz, JG Jooste, N Dembitzer H Verwey, E Fourie, SL Mahlangu, A Griesel, T Dreyer, A Hassim

Associates: ET Khuzwayo, TNN Molefe, A Nxasana, C Maas, JR Myers, KZ Sebonka, APJ Wessels, YL Nyameni, P Naidoo, T Ndaule MT Mbense, R Suping, PT Motshele, TV Phahla, CC Williams, F Masedi, RL Munusamy



1. Introduction

- 1.1. MacRobert Inc. was requested to submit responses to the inferences, remarks and objections submitted by the Centre for Environmental Rights (CER) dated 3 April 2025 in response to the subject application.

The CER legal submissions are intertwined with various averments regarding supposed unacceptable environmental and health impacts, which is expanded upon in a document penned by an unknown author, attached as “Annexure A” to the submissions¹ (**CREA Report**). Our responses on technical and scientific matters are on advice by- and confirmation of independent specialists Airshed and Infotox.

2. No identified expert or contextual analyses

- 2.1. The CER refers to “expert reviews” in paragraph 65 and generally relies for purposes of their “scientific” submissions on the attached CREA Report.
- 2.2. There is no author indicated in the report and it is accordingly impossible to determine whether the author has any particular expertise or, to the extent that this may be relevant, carries any advisory or other accreditation in terms of South African statutory standards. This leaves the very credibility of the CREA report in doubt from the outset.
- 2.3. The CREA Report wildly speculates on various presumed health impacts, none of which are motivated in context of the AMSA scenario in this application, and which are disproven by accredited specialists. On the face of it, the CREA Report is neither a peer review nor an independent assessment of either the AIR or the Health Risk Assessment. Instead, it is at best an extraction from various studies, the baseline information which has no physical bearing on the context of this application or the AMSA VDBP setting.

¹ ArcelorMittal South Africa – alternative sulphur dioxide (SO₂) emission limit application – April 2025

- 2.4. On this basis, the unknown author of the CREA Report purports to criticise the Air Impact Report (AIR), the dispersion modelling approach as well as the Health Impact Assessment (HIA). The AIR is authored by Ms G Petzer who is a registered professional engineer with the Engineering Council of South Africa, in terms of the Engineering Profession Act 46 of 2000. Moreover, the AIR is subject- and site specific. Similarly, the HIA, Dr W van Niekerk of Infotox, has extensive local (and international) accreditation as reflected in the HIA, *inter alia* with South African Council for Natural Scientific Professions under the Natural Scientific Professions Act 27 of 2003.
- 2.5. References in the CER submission to generalised views of the so-called “Special Rapporteur” (par’s 48 – 49) and further generalised statements about the state’s obligations (51 – 56) are subject to the same criticism. Generalised observations like these which are devoid of contextual analyses can play no role in evaluation of detailed site specific, contextual and above all, quantitative assessments and conclusions by registered specialists.
- 2.6. Ultimately the CER concludes that approval of the application will constitute a breach of the “State’s obligation” (par 56). This averment is false as we will illustrate further below.

3. The interpretation of section 12A of the Listed activities (Paragraphs 57 – 61)

- 3.1. We first point out that the CER’s reference in paragraph 61 with respect to the granting of “...*alternative limits weaker than the old standards...*” is moot. This application does not seek such a standard.
- 3.2. At par 59, the CER purports to seek the “*most correct interpretation of the allowance provided for in Paragraph 12A*”. That horse has bolted because the salient interpretational objections raised in paragraphs 57 to 61 had already been decided by Minister Creecy in the appeal decision of 4 April 2024 (LSA 234243) and maintained in the subsequent decision of Minister George (LSA 234243/2) of 25 July 2024.
- 3.3. The Ministers’ collective findings hold that an alternative emissions standard in terms of paragraph 12A may be granted and was granted beyond 1 April 2025.
- 3.4. This decision on the correct application of section 12A must be given effect to in accordance with the principles set out in ***Oudekraal Estates (Pty) Ltd v City of Cape***

Town and Others². In this matter, the SCA determined that an administrative order stands until set aside by a court of competent jurisdiction. Until that is done, the administrative order is presumed to be correct³. The position was further confirmed in ***MEC for Health, Eastern Cape and Another v Kirland Investments (Pty) Ltd t/a Eye & Lazer Institute***⁴.

- 3.5. The CER avers at par 60 that a section 12A application is akin to an impermissible exemption under section 59(1) as read with section 9(c). This is not true for at least two reasons. Firstly, where an Act provides for two modes of application for relief, that fact does not invalidate any of the two modes. Secondly, the preclusion of exemptions from section 9 (whether for purposes of Section 9(c) or otherwise) bears no relevance to section 21, which is the provision in terms of which the standards pertinent to this application were published.

4. The prerequisites of section 12A (Paragraphs 62 – 63⁵)

- 4.1. The CER's submissions reflect a critical misrepresentation of the wording and logic of the Minimum Emission Standards (MES)⁶.
- 4.2. The pollutant which is the subject of this application is SO₂. As quoted in par 62 of the CER submissions, the qualifying requirement (in this instance) for the availability of Section 12A, is the proviso in section 12A(c)(i). That is, that there is material compliance with the National Ambient Air Quality Standards (NAAQS) in the area for SO₂. This compliance was illustrated and is dealt with in our responses against paragraph 67 of the CER submission further below.

² 2004 (6) SA 222 (SCA)

³ p242 *"Until the Administrator's approval (and thus also the consequences of the approval) is set aside by a court in proceedings for judicial review it exists in fact and it has legal consequences that cannot simply be overlooked. The proper functioning of a modern State would be considerably compromised if all administrative acts could be given effect to or ignored depending upon the view the subject takes of the validity of the act in question. ..."*. See also Baxter Administrative Law at 355: *"There exists an evidential presumption of validity expressed by the maxim omnia praesumuntur rite esse acta; and until the act in question is found to be unlawful by a court, there is no certainty that it is. ..."*

⁴ 2014 (3) SA 481 (CC) *"The approval in question was, ..., a decision taken by the incumbent of the office empowered to take it, and remained effectual until properly set aside. It could not be ignored or withdrawn by internal administrative fiat"*

⁵ The representations from paragraph 64 onwards rather deal with report contents and is dealt with under the subsequent section

⁶ GN 893 of 22 November 2013

- 4.3. What the CER seeks to do, is to introduce elements into this proviso, which simply does not exist, that being, an imaginary prerequisite for NAAQS compliance in respect of PM into section 12A(c)(i). This recommended approach is both untenable and unlawful:
- 4.3.1. It is settled law that the clear language of a statute must be abided by. It is not for either the public or the administration to read words or phrases into a statute which are simply not there. The CER may wish that PM₁₀ and PM_{2.5} NAAQS compliance were a prerequisite for an application pertaining to SO₂, but it is not.
- 4.3.2. The CER's submission that NAAQS in respect of PM is a prerequisite to the right to make an application under section 12A in respect of SO₂ is based on unsupported assumptions, followed by unlawful leaps of abstraction, as follows:
- 4.3.2.1. Firstly, the CER assumes that the legislature was completely oblivious of the conversion of SO₂ to PM in setting the NAAQS for SO₂. This assumption is entirely unsubstantiated.
- 4.3.2.2. If the logic or methodology for establishing the NAAQS for SO₂ in relation to PM conversion stands to be challenged (for which there is no evidence), the CER must do so by legal review of the statute. It cannot do so in comments to an administrative application.
- 4.3.2.3. This notwithstanding, the CER implies not only that this assumption be made out of hand, but suggests further that the NAQO should proceed to infer that section 12A(c)(i), as it stands, is therefore incorrect.
- 4.3.2.4. The submission then makes a further leap by proposing that the NAQO must ignore the clear wording of the statute and supplant the requirements of section (12A)(a)(i) with something entirely different.
- 4.3.3. This proposition cannot hold up. What is required for purposes of the SO₂ 12A application in relation to PM, is compliance with point source emission limits. This had been illustrated in the application.

- 4.3.4. The CER makes further submissions on PM and in particular PM_{2.5} in relation to the submitted reports by Airshed and Infotox, which we will address further below.

5. The Atmospheric Impact Report Model (Paragraph 66)

- 5.1. Airshed used the AERMOD dispersion model. We are advised by Airshed as follows:
- 5.1.1. Based on the Regulations Regarding Air Dispersion Modelling⁷, AERMOD is the recommended model for more sophisticated applications in all terrain types where the greatest impacts are expected less than 50km from source.
- 5.1.2. At AMSA Vanderbijlpark, the greatest impacts are indeed expected less than 50 km downwind and that under these circumstances, the AERMOD model is appropriate.
- 5.1.3. Although the AERMOD model is not able to calculate the secondary PM from sulfates, such an assessment on PM is not required by law as set out above in our responses to the CER's submissions at paragraphs 62 to 63.

6. SO₂ NAAQS Compliance (Paragraph 67)

- 6.1. At paragraph 67 the CER avers that SO₂ NAAQS are "frequently exceeded". This is untrue. Compliance with the NAAQS incorporates an allowance of 88 hours of exceedance per year.
- 6.2. The maximum number of times the hourly limit was exceeded was 28 times at Bongani Mabaso Eco Park during 2021. This is not only in compliance with the NAAQS, but no exceedance of this modest number of exceedances (which is already compliant with the NAAQS) had been recorded since. At section 5.1.4.3.3 of the AIR, ambient SO₂ concentrations are shown to be compliant with the NAAQS at all the surrounding stations during 2021 to 2023.
- 6.3. Moreover, the simulated impact from AMSA (for all scenarios, current and proposed increase) indicate no violation of the NAAQS and also that the allowed and already compliant number of exceedances is unlikely to increase.

⁷ GNR.533 of 11 July 2014

- 6.4. The CER's statement that granting of the alternative limits as applied for would "*likely exacerbate non-compliance*" is accordingly not only unsupported, but proven to be untrue.
- 6.5. It is denied that the application does not motivate the basis for the requested alternative standard. The CER presents no proper motivation for its averment that it does not.

7. Geographical Coverage of Assessment (Paragraph 68)

- 7.1. The Regulations Regarding Air Dispersion Modelling, provide that the modeller must identify the modelling domain required. It is also important to note that at 1.6 of Code of Practice for Air Dispersion Modelling in Air Quality Management in South Africa, 2014 it is stated that "*...professional judgment of technical experts conducting the modelling exercise, and those carrying out the regulatory tasks will always be required*".
- 7.2. We are advised by Airshed that the size of the modelling domain is influenced by a number of factors such as source buoyancy, terrain features and the location of contributing sources.
- 7.3. Airshed further advises that given these factors, as applied in context of the AMSA Vanderbijlpark setting, the greatest impacts are not only captured in the 10 x 10 km domain, but the annual impact of SO₂ at the domain extremities was approximately a mere 5 µg/m³. As such, Airshed advises that in their professional and expert opinion, a larger domain was not required in context and would not have yielded a more appropriate analysis.
- 7.4. In context of PM_{2.5}, it is reiterated that an assessment as to the NAAQS is not required for purposes of an application in terms of section (12A) pertaining to listed activity 4.12. See in this regard paragraph 4 above. Nevertheless, Infotox advised that while it is true that particulates can travel over long distances, the ambient air concentrations reduce with increasing distance from the source, resulting in reducing PM_{2.5} exposure concentrations further away from the source. Risks outside the 10 km x 10 km modelling domain in Vanderbijlpark can logically not be higher than the risks calculated in the health risk assessment report.

8. Mercury (paragraphs 68 and 69)

- 8.1. The CREA report (at unnumbered page 3) speculates as to some "likely" associated Mercury emissions. All that is deduced from this statement on the following page is that

the “*use of SO₂ control techniques to comply with the MES limit would likely reduce (Mercury) emissions...*”.

- 8.2. This statement takes no cognisance of the actual statutory application parameters, but more importantly, does not come to any rational finding that implies that an assessment obligation arises on the part of AMSA with respect to Mercury. It seems from the content of the CREA report that their conclusion is based on coal combustion installations. The application under consideration relates to a direct reduction facility which is not comparable to combustion installations.
- 8.3. The pollutants subject to assessment for purposes of an alternative standard for listed activity 4.12, *other than SO₂*, are point source emissions of PM and NO₂. Mercury (Hg) does not feature in listed activity 4.12 at all and is not applicable to the listed activity 4.12, which is the subject of this application. As a precautionary measure however, Airshed advises that from October 2024 sampling done at the direct reduction kilns, Hg emissions measures 0.00489 mg/Nm³, that is, more than ten times lower than any standard imposed elsewhere, and in any event not applicable to the listed activity which is the subject of this application
- 8.4. The CER submissions do not in any way motivate the entirely unsubstantiated proposition that Mercury emissions “*have neurological and cardiovascular health consequences*” in context of the current application.
- 8.5. Under the circumstances, it is submitted that Mercury does not have any bearing on the application before the NAQO from either a statutory or logical perspective.

9. Increase in tonnes per annum emissions (Paragraph 69)

- 9.1. The CER, in citing the increase in emissions in tonnes per annum, states that “*Previous studies suggest that such an increase would lead to substantial public health consequences, including thousands of excess deaths per year due to air pollution*”. This generalised averment has no bearing on the AMSA VDBP setting and parameters.
- 9.2. Infotox advises that this statement is simply not true in relation to the ArcelorMittal Vanderbijlpark operations. Infotox calculated health risks for all the scenarios, including the emission increases of 8 413 to 15 595 tonnes per annum. The assessment presented in Section 10 of the HIA, concluded that risks would be insignificant for all SO₂ release scenarios, including those scenarios where the alternative MES of 1 600 mg/Nm³ is applied. No rebuttal of these site-specific findings is to be found in the MES

submissions, let alone from a qualified professional specialist, or even an identified author.

- 9.3. Infotox further advises that the broad stroke qualitative reference to “*international environmental commitments*” is entirely inappropriate in a context where a quantitative community health risk assessment has indicated insignificant health risks.

10. Sensitive Communities (paragraph 70)

- 10.1. As required by the Regulations regarding Air Dispersion Modelling, the AIR identified schools, hospitals and residential zones in the modelling domain. Discrete receptors were placed in these areas to assess the emission concentrations at these points.
- 10.2. Again, the CER representations do not attempt to rebut this aspect of the AIR and in fact confirms as much at paragraph 70 by noting the large number of sensitive receptors considered.

11. Conclusion

It follows from the above that the application as submitted is, firstly, allowed in law and secondly, properly motivated. The CER's submissions are at best extrapolated generalisations or conjecture. Most notably, the CER has not made any credible legal submission, nor did it submit any credible and/or feasible technical rebuttal (if at all) of the specialist and site-specific findings of the AIR or HIA that warrant dismissal of the application.



Kenneth Cameron
MACROBERT INC

ARCELORMITTAL NEEDS A JUST TRANSITION, NOT AN EXIT

The debacle that is the closure of ArcelorMittal's long steel business shows that you can't call it a 'transition' if workers and communities are left behind.

BY TARISAI MUGUNYANI
JUNE 23, 2026

Employees of ArcelorMittal SA, and the communities around Newcastle and Vereeniging, face a bleak and uncertain future in the wake of the company's decision to close its long steel business in the country.

This moment, while saying a lot about the fallout of deindustrialisation in South Africa, has also shone the spotlight on the indispensable role that workers play in sustaining the country's social and economic fabric, and how frequently this is ignored entirely.

The spectre of job losses and economic anxiety has hung heavy over ArcelorMittal's employees ever since the company announced in January 2025 that it would wind down the long steel business after prolonged pressure from high electricity and logistics costs, weak growth and competition from low-cost imports.

At the time, the company said 3,500 direct and indirect jobs could be affected, but the collateral impact on towns like Newcastle, which was heavily reliant on ArcelorMittal, would be far greater. For these communities, everything is on the line: families, school fees, grocery bills and the future of the generations they are raising.

In this context, it is hopelessly insufficient for companies to simply give workers accolades in speeches while factories fall silent and towns disintegrate.

In the end, despite a number of attempts to prevent this closure, ArcelorMittal went ahead and placed its long steel business into “care and maintenance”. ArcelorMittal still retains its other businesses – including the flat steel operation and other specialised units – but this left a considerably smaller footprint in towns like Newcastle.

Quite how this will play out eventually is unclear. The state-owned Industrial Development Corporation (IDC), which already owns 8.2% of ArcelorMittal and which put money into the business to prevent its collapse, is in talks about buying a larger stake, it seems.

Earlier this month, ArcelorMittal said it is “continuing to engage” with the IDC “in respect of a potential transaction”, though it hasn't finalised a deal. ArcelorMittal said the anticipated timeline “has been delayed”, but much hinges on whether Eskom will agree to give it a reduced electricity tariff.

But this is clearly a business that needs an overhaul. In its financial results for the year to December, ArcelorMittal produced a R1.09bn pre-tax earnings loss, with sales down 12%.

The workers did not create this structural failure, yet they were the most impacted. And this damage didn't stop at the plant gate, but ricocheted out to the wider micro economy.

Transporters lose contracts; informal traders lose customers; suppliers shrink; municipal pressure for service delivery and income generation grows. Younger South Africans see fewer reasons to stay in those communities, so they leave, creating a further squeeze.

This decline of industrial work becomes the decline of community confidence and sustenance. That is why this moment should matter not only to those directly employed by ArcelorMittal, but to everyone concerned about South Africa's productive future.

New perspective needed

This is not just a story of one company collapsing; it's a story of South Africa steadily shedding its industrial base, while workers and communities bear the brunt of the fallout.

This is precisely why a just transition lens is essential. The Presidential Climate Commission has been clear that any just transition must address a number of things, including jobs, local economies, skills, social support and governance.

Three core ideas underpin this: procedural justice, distributive justice and restorative justice. In other words, workers and communities must have a meaningful voice in decisions; the burden of change must be shared fairly; and areas damaged by transition must be actively supported.

Measured against that standard, a transition that begins with job losses and ends with community decline is not "just" – it is abandonment dressed up as inevitability.

So what does this mean for ArcelorMittal?

Well, first, any just transition for its workers would start with an honest, binding social dialogue. The consensus on just transition practice has made the same point: legitimacy depends on workers, communities, business and the state shaping the process together. That means no more closed-room decisions followed by public explanations.

Specifically, workers require material protection, not rhetorical concern. If operations are being wound down, they need income support, fair severance, debt relief pathways, retraining links to real jobs, and clear timelines for what support exists and how long it will last.

Communities need targeted recovery plans, including local industrial diversification, support for small enterprises, infrastructure investment and municipal stabilisation.

And, as a country, we need to pose the hard questions to government, business and labour: what does it mean to publicly sing the praises of your workers when they become the shock absorbers of industrial failure?

What needs to happen at ArcelorMittal is clear: there needs to be a binding just transition strategy for its workers and communities. This needs to include transparent social dialogue, funded social protection, credible retraining and specific economic recovery plans.

If the country is serious about worker dignity, this is the opportunity to prove it.

Tarisai Mugunyani is the head of the mining programme at the Centre for Environmental Rights.

Annexure E

Withdrawal Letter of previous application in 2025



Chief Director: Air Quality Management
Designation: National Air Quality Officer
Department of Forestry, Fisheries and Environment (DFFE)
Environment House, 473 Steve Biko, Arcadia
Pretoria, 0083, South Africa

PER EMAIL

Dear Dr Gwaza

31ST July 2025

RE: AMENDMENT TO THE SUBMITTED APPLICATION FOR ALTERNATIVE EMISSION STANDARDS IN TERMS OF REGULATION 12A OF GOVERNMENT NOTICE 893 PROMULGATED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (NO 39 OF 2004) FOR ARCELORMITTAL VANDERBIJLPARK, GAUTENG PROVINCE.

ArcelorMittal SA is the largest maker of long and flat steel products in Africa, supplying more than 60% of its steel and boasting a presence in 60-plus countries. Products include billets, carbon steel, cold-rolled steel sheets and hot-rolled steel plates. Its Vanderbijlpark Works produce flat steel while its Newcastle and Vereeniging Works turn out long steel products. The uncertainty for Long steel operations remain a concern which could lead to more than 3 500 direct job losses. With this change in the company structure in mind, the strategy for the optimisation and improvement of the flat steel operations in critical, to ensure the Vanderbijlpark operations remain sustainable. Ongoing review of strategy(s) is necessary to ensure sustainable operations during this difficult and challenging economic climate.

As per Regulation 12A of Government Notice 893 ("Notice") promulgated in terms of Section 21 of the National Environmental Management: Air Quality Act, No 39 of 2004 ("NEMAQA"), ArcelorMittal South Africa has applied on the 22nd of April 2025 to the National Air Quality Officer as required by regulation (12A) of the Notice. The application addressed the proposed alternative emission limit in terms of Section 12A for SO₂ emission standards at the DR Kilns 1 – 6 for 1 600 mg/Nm³. The application included an air quality impact report, health risk assessment and motivational report relevant to the strategy at the time.

ArcelorMittal SA need to amend the submitted 12A application due to changes regarding the future strategy. The relevant changes do have an emission impact from the facility which include:

- 2 Coke making batteries were included but have since been shut down on the 26th of July 2025.
- New battery including a gas cleaning plant scheduled for construction during 2028, cannot be committed to anymore at this stage and will most probably not be implemented.
- ArcelorMittal SA is of the opinion that the trail to reduce SO₂ from the kilns in question that will commence during August 2025, needs to be completed to enable the department to make an informed decision.

ArcelorMittal SA has already commenced with the 12A review process regarding the air quality impact report, followed by health risk assessment and motivational report so that the updated corrected scenario can be submitted to the department after I&AP process.

Public Participation

ArcelorMittal SA has reappointed Zantow Environmental Consulting Services to undertake a Public Participation Process (PPP) for the above-mentioned application. According to Section (2)(4)(f) and (o) of the National Environmental Management Act (Act 107 of 1998) – “NEMA” (as amended).

Conclusion

ArcelorMittal will amend and resubmit for an alternative emission limit at the DR Kiln's for SO₂.

The use of desulphurisation abatement equipment to reduce SO₂ at DR Kilns are uneconomical therefore alternative SO₂ reduction method being trialled to enable using of the existing abatement equipment. Trial results will be incorporated into amended application.

Please feel free to contact us at any time, should you require any additional information

Yours Sincerely



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