

Minutes

Royal HaskoningDHV (Pty) Ltd

Southern & Eastern Africa Transport and Planning

Present: Terrence Wilson (TW) (ArcelorMittal), Siegfried Spaning (SS) (ArcelorMittal), Johan Hattingh (JH) (ArcelorMittal), Ilze Broekman (IB) (ArcelorMittal), Samson Mokoena (SM) (Veja), Marcia Ramos (MR) (ArcelorMittal), Seshni Govender (SG) (Royal HaskoningDHV) and Stuart Thompson (ST) (EBS Advisory)

Apologies:

From: Seshni Govender

Date: 19 February 2019

Location: Stonehaven on Vaal, Vanderbijlpark

Copy:

Our reference: MD4178_M01_P0.04

Classification: Project related

Enclosures:

Subject: PUBLIC MEETING: APPLICATION FOR A POSTPONEMENT AND ALTERNATIVE PLANT STANDARDS OF THE LISTED ACTIVITIES AND ASSOCIATED MINIMUM EMISSION STANDARDS, ARCELORMITTAL VANDERBIJLPARK WORKS

Number	Details	Response
1	Introduction	
2	<p><u>Public Participation:</u></p> <ul style="list-style-type: none"> ■ Initial Notifications: 08 February 2019 ■ Public Meeting: 19 February 2019 ■ Commenting Period for Draft Report: 19 February 2019-22 March 2019 ■ Submission to DEA: 31 March 2019 	
3	<p><u>Technical Presentation:</u></p> <ul style="list-style-type: none"> ■ Vanderbijlpark Works consists of iron-making, steel making and rolling facilities ■ Currently hold an Atmospheric Emissions Licence <ul style="list-style-type: none"> □ 17 Listed Activities <ul style="list-style-type: none"> ○ Category 1 – Combustion Installations ○ Category 3 – Carbonisation and Coal Gasification ○ Category 4 – Metallurgical Industry ○ Category 5 – Mineral Processing, Storage and Handling ○ Category 7 – Inorganic Chemicals Industry 	

Number	Details	Response
	<ul style="list-style-type: none"> ■ ArcelorMittal intends to apply for a postponement of the compliance timeframes to achieve the minimum emissions standards for certain plants at the Vanderbijlpark Works ■ Three aspects <ul style="list-style-type: none"> □ Coke Ovens – H₂S □ DR Kilns – SO₂ □ Lurgi Plants – HCl ■ Coke Ovens <ul style="list-style-type: none"> □ Postponement application is required for the special arrangement stipulated under Sub-category 3.1: Combustion Installations □ Although a project has already been initiated to, amongst others, revive sulphur recovery from the coke oven gas □ Deadline will not be achievable owing to the complexity of the intended upgrades to the gas cleaning facilities. □ Despite numerous attempts to ensure operations of the current sulphur recovery facilities, the long-term operation of this failing equipment was no longer feasible. □ Hence the decision to invest in the installation of new, state-of-the-art equipment for the cleaning and recirculation of by-product coke oven gas for utilisation as a fuel source on site. □ Although the above-mentioned upgrades are anticipated to aid in a partial reduction of H₂S emitted from the coke battery stacks, it is not foreseen that the recovery of sulphur from the coke oven gas will yield H₂S stack emissions below the prescribed minimum emission standards. Achievement of both the current prescribed H₂S standard of 10 mg/Nm³ for existing plants and 7 mg/Nm³ for new plants (to be achieved by all plants by 1 April 2020) is unfeasible for Coke Batteries of the technology and age as those at the Works. An alternative H₂S stack emission standard of 150 mg/Nm³ will thus be proposed for the 5 coke batteries on site. 	

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	<ul style="list-style-type: none"> ■ Direct Reduction Kilns <ul style="list-style-type: none"> □ Postponement for the Direct Reduction kilns (3 in operation) to achieve the new plant emission standard for SO₂ of 500 mg/Nm³ (Sub-category 4.12: Pre-reduction and Direct Reduction). □ 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 fuel and reducing agent in the kilns on site. □ For this reason, an application for an alternative emission standard of 1700 mg/Nm³, aligned with the existing plant standard, is proposed to be submitted ■ Lurgi Plants <ul style="list-style-type: none"> □ Postponement application is required for the Lurgi Plants (3 units) (Sub-category 7.2: Production of Acids) for the regeneration of Hydrochloric Acid at the Works. □ This postponement is anticipated as the planned upgrades to the scrubbing facilities at the Lurgi Plant, to reduce and sustain the HCl emissions from these stacks below the new plant standard of 30 mg/Nm³, may not be completed or fully efficient by 1 April 2020. □ Pending the outcome of the upgrade trials scheduled for February/March 2019, a postponement of compliance timeframes to achieve the new plant standard may be necessary, should the standard not be achievable with the upgraded plant. A final decision on this matter can only be made subsequent to the trials. ■ Modelling Scenarios <p>The proposed air quality ambient impacts associated with the following four operational scenarios:</p>	

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	<p>1 Status Quo – Current routine operations at ArcelorMittal South Africa Vanderbijlpark Works (AMSAVW);</p> <p>2 Current AEL Limits – Authorised emission ceiling;</p> <p>3 New minimum emission Standards - Future Performance based on current emissions with alternative coke battery standard for H₂S (150 mg/Nm³) and kiln standard for SO₂ (1 700 mg/Nm³), whilst also considering the proposed postponements; and</p> <p>4 Current minimum emission Standards - Future Performance based on current emissions with achievement of existing plant standards for the coke batteries, direct reduction kilns and lurgi units.</p> <p>The outputs of this modelling exercise represents four scenarios, namely, authorised emission releases as per AEL (emission ceiling), current routine operations (status-quo), future performance based on current emissions with achievement of new plant standards for the coke batteries, direct reduction kilns and lurgi units; and the future performance based on current emissions with alternative coke battery standard for H₂S (150 mg/Nm³) and kiln standard for SO₂ (1 700 mg/Nm³), whilst also taking into account the proposed postponements.</p> <p>The majority of the airborne pollutants are compliant to the national ambient air quality standards, with SO₂, and NO_x exceeding the national ambient air quality standard, under Scenario 1 and 2 respectively.</p> <p>The SO₂ during the current Status Quo routine operations and for the current AEL Conditions are not compliant to the NAAQS for a 1-Hour averaging period only. For these emission exceedances, a total of 88 exceedances are allowed. When analysing the number of exceedances, the Status Quo operations will result in an exceedance a total of 8 times, and 23 exceedances are noted under the current AEL conditions (authorised emission standard). There is an exceedance noted for the NO_x AEL Conditions (it is noted that this scenario merely depicts the authorised emission standard and is</p>	

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	<p>not a reflection of the current performance), this is over a 1-hour averaging period. A total of 911 exceedances (above the 88 permissible exceedances) were modelled.</p> <p>With the enforcement of the new emission limits in April 2020 all pollutants modelled will comply with the prescribed ambient standards. Similar under scenario 3, which is the scenario AMSAVW are requesting approval for, all pollutants modelled will comply with the prescribed ambient standards.</p>	
4	<p><u>Discussion:</u></p> <p><u>Issues Raised by Mr Mokoena:</u></p> <ul style="list-style-type: none"> ■ There should be an adequate public participation process, consultation should be within the affected communities, the chosen venue is not deemed to be adequate as people who are affected can't access it ■ Documents should be in appropriate language such as Zulu or Sotho ■ Communities are being held ransom by poor air quality 	<p><u>Terrence Wilson (ArcelorMittal):</u></p> <p>The public meeting venue was identified as a suitable location owing to its roughly central location in the Vaal Triangle Airshed Priority Area, i.e. the area which will be impacted by the proposed applications. In a recent public meeting which was held at a venue located within ArcelorMittal Vanderbijlpark Works, in fulfilment of the public participation requirements for another authorisation process, Mr. Mokoena objected to the meeting being held at the Works on the grounds that the venue is allegedly inaccessible.</p> <p>This despite the majority of the workforce at ArcelorMittal commuting to work via taxi or by foot on a daily basis. This particular venue was identified as an opportune venue owing to its core location within the neighbouring communities of Boipatong (to the east), Bophelong (to the west), Sebokeng (to the north) and Vanderbijlpark (to the south). Nevertheless, an alternative venue was arranged at Mr. Mokoena's request to hold an additional public meeting.</p> <p>Mr. Mokoena argued that the new location (closer to Vanderbijlpark CBD) would be more suitable for members of the public to attend the meeting. On the contrary, poor attendance of this meeting was noted, with the majority of participants querying matters other than that which the meeting was intended for.</p> <p>Mr. Mokoena's argument that the location of the public meeting, to highlight the dispersion modelling results and provide background to the proposed applications, is not of such to draw local interest is unjustified, as there has also been interest on even a national level with involvement from NPO's based in Kwazulu Natal and in the Cape.</p>

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		<p>It should be noted that the public meeting which was arranged as part of the public participation process is over and above what is legally required. Furthermore, all directly notified I&AP's (which constitute a database at the ArcelorMittal Vanderbijlpark Works) had the opportunity to raise concerns regarding the venue location prior to the meeting.</p> <p>English is the preferred language of communication as English is a universal language</p>