

**ENVIRONMENTAL DUST IMPACT REPORT FOR THE  
PROPOSED MIDVAAL BRICK MANUFACTURING  
FACILITY, SA BLOCK (Pty) LTD, MEYERTON,  
GAUTENG**

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**APPENDIX 1: CURRENT DUSTFALL DATA**

## 1 BACKGROUND

SA Block requested OH&AP Consulting Services to do a preliminary evaluation of the environmental dust impact of a Brick manufacturing plant on the Henley on Klip site. The following principles will guide the establishment of a Brick manufacturing plant on the site:

- a) Atmospheric and workplace dust emissions sources will be identified, and control measures implemented to ensure continued compliance with legislated limits
- b) Pollutant-specific in-house and environmental programmes will be implemented to monitor compliance with legislated parameters
- c) Interested parties will be afforded the opportunity of insight into and comment on information regarding emission control measures planned.
- d) The proposed plant owners will monitor compliance of in-and outdoor dust emission control equipment where required at the legally prescribed frequency.

## 2 LEGISLATIVE REQUIREMENTS

In terms of the Atmospheric Pollution Prevention Act the predicted dustfall from the Brick manufacturing plant, in addition to the existing dustfall in the surrounding in the area, shall not exceed the standards in Table 1 below.

<b>TYPE OF AREA</b>	<b>Dustfall Rate (D) (mg/m<sup>2</sup>/day, 30-day average)</b>	<b>Permitted frequency of exceeding dust fall rate</b>
Deposition in Residential Areas	< 0.6 g/m <sup>2</sup> /day	Two within year, not sequential months
Deposition in Non-residential Areas	0.6 g/m <sup>2</sup> /day < Deposition < 1.2 g/m <sup>2</sup> /day	Two within year, not sequential months

Table 1 – Dustfall standards as specified in the Air Quality Act

### **3 EMISSIONS OF PROPOSED PLANT**

The main sources of dust emissions outside the plant will be the following:

- Road dust from the movement of haul trucks over the terrain for the delivery of process material,
- Off-loading of process material,
- Open storage of process material,
- Movement of loaders over the terrain through loading and off-loading of process material
- Loading and off-loading of process material
- Discharge of material from loaders into bins
- Dust laden air displaced from silos through material entering silos
- Dust emitted through material handling inside the plant

The processing plant will be housed inside an enclosed structure. Any dust emissions inside the plant will be controlled at an Air Quality Index of less than unity, as required by the relevant Occupational Health Legislation.

### **4 DUST IMPACT RATING**

The owners of the project are committed to control dust emissions within the legal limits considering the existing dustfall conditions.

The impact rating of the proposed project is projected to be low provided the mitigating measures are implemented against backdrop of the prevailing dustfall conditions at the boundaries of the existing site.

The theoretical dust impact of the proposed project will be calculated once the design specific control measures have been formalized and the efficiencies of any dust extraction and filtering systems have been finalized.

## **5 MITIGATING MEASURES**

The mitigating control measures planned for the are as follows:

- The paving and mechanical cleaning of access roads and material storage areas
- Building of product storage bunkers to limit windblown dust
- The implementation of dust suppression at storage bunkers
- The use of dust suppression at material transfer points
- The implementation of dust extraction with filtering system on top of silos
- Dust extraction and filtering of emissions from and sources inside building

The theoretical dust impact of the project will be determined though modelling once the plant design has been finalized.

The impact assessment will consider the existing impact of mining activities on the community considering historical dustfall data. The report of such measurements undertaken over time is available on request.

The main objective of the survey is to determine noise zones and noise-rating

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Managing Member, OH & AP Consulting Services