

For the Revision of the Environmental Management Programme report for Umlaas Road Quarry


[operated by AfriSam (South Africa) (Properties) (Pty) Ltd] – Mining Right Number - KZN (258) MR

Dear I&AP

14th June 2022

In response to the findings of the December 2020 Environmental Audit, Umlaas Road Quarry revised their approved Environmental Management Programme report (EMPr) during 2021. Prior to circulating the revised EMPr, the process was put on hold due to a land claim on one of the properties within the Mining Right area. As a decision on the land claim has been made, the EMPr revision process is being re-initiated and all registered interested and affected parties (I&AP) are being notified.

As part of the notification, a Background Information Document (BID) is being circulated again, which includes a description of the site, a summary of the activities being undertaken, the potential impacts (identification and preliminary evaluation) and the current manner of control. This BID also serves to initiate your involvement in the process, providing you with an opportunity to confirm your registration as an I&AP in order to be involved in the full process.

Applicant: AfriSam (South Africa) Properties (Pty) Ltd	
Consultant: Lynn Whittington-Jones, Umhlaba Environmental Consulting CC	
Proposed Activity: Revision of the approved EMPr to i) bring it in line with current legal requirements, and ii) to document environmental outcomes with supporting management actions, considering current activities and long-term plans.	
Location: The existing mine is located on <i>Subdivision 419 (of 250) and Remainder of Subdivision 182 (of 172) on the farm Vaalkop and Dadelfontein No 885</i> , approximately 20km south-west of Pietermaritzburg central business district (CBD), adjacent to and accessible from the N3.	
History: Quarrying operations at Umlaas Road began in 1968 when an old railway cutting through the Karoo tillite was exploited as building aggregate. Hippo Quarries (Pty) Ltd [now AfriSam (South Africa) (Properties) (Pty) Ltd] took over operations in 1983 and continues to operate on the site today. Umlaas Road Quarry operates under a new order mining right [KZN (258) MR].	
Legal: The EMPr is being updated in accordance with Regulation 34(4) of the EIA Regulations ¹ , as recommended in the Environmental Audits. No listed activities are triggered through this amendment process. This consultation process is initiated in accordance with Regulation 34(5).	
BID Content: This BID has been compiled to provide you with a brief description of; A) the <u>baseline environment</u> (page 2), B) the <u>preliminary impact assessment</u> and the current <u>manner of control</u> (page 3) This is to allow I&AP to identify potential impacts they believe have been missed and / or to provide input into the significance ranking. C) A description of an <u>I&AP involvement</u> in the process (page 5).	

¹ Government Notice, Regulation No. 324 to 327, in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended

A) BASELINE ENVIRONMENT

A description of the baseline environment is provided for the mining right area to allow I&AP an opportunity to identify where additional information can be provide in order to improve the description and / or provide relevant information to be used in the impact evaluation.

Site Status:	Includes typical opencast activities; i.e. quarry pit, crushing and screening plant, stockpiles (topsoil, overburden and product), workshops and admin buildings.
Topography & Soils:	The highest point within the MR area is the hill top towards the south-western side. From here the land slopes down to the south (outside of the MR area) and to the north and the east (within the MR area). At the base of the eastern slope was a lower hill top where the quarry is now located. From this former hill top (now the quarry pit), the land slopes to the north, east and south. The soils across the entire site are classified as Lithosols; shallow soils on hard or weathering rock.
Water:	<p><i>Surface water:</i> The mine is in the Mgeni Sub-WMA of the Mvoti to Umzimkulu WMA. Although there are no perennial streams within the MR area, there are a number of non-perennial streams that originate either on the edge of or within the MR area. The farm dam in the north-west is the only wetland and is considered an artificial wetland.</p> <p><i>Ground water:</i> The mine is located over the Kwazulu-Natal Coastal Foreland (Region 47) which consists mainly of secondary water-bearing formations. According to the data available in the National Groundwater Archive, the historic quality of the ground water is similar to the water in the quarry pit. A hydrocensus (2018) identified three boreholes within a 1 km radius of the mine; used for domestic and / or irrigation and / or livestock.</p> <p><i>Water Quality:</i> The quality of the water collected in the quarry pit (a combination of seepage and rainfall) has been measured monthly since April 2015. During this period, the quality has been consistent with no concern areas noted.</p>
Ecology:	The MR area is covered by two vegetation types; the upper slopes of the western hill are covered by Dry Coastal Hinterland grassland (a threatened terrestrial ecosystem) while the lower slopes (to the north and east) are covered by KwaZulu Natal Hinterland Thornveld. According to the EIA Screening Tool and BGIS databases, some red data / species of conservation concern have been identified within the vegetation types that occur on-site and the ecosystem in which the mine is located (but not specifically within the mining area).
Air Quality:	The opencast mining, crushing and screening activities within the Mining Right area generate fugitive dust emissions. Dust fallout monitoring results from sites located around the Mining Right area will be used to determine the baseline air quality. Based on available data (Apr-15 to Mar-22), dustfall rates on the edges of the premises and at off-site samplers are acceptable. Samplers located within the premises typically record rates below 1 200mg/m ² /day (with few isolated exceptions) and samplers located outside the premises typically record rates below the non-residential standard (with two non-reportable exceedances in 2016, one in 2020, and one in 2021).
Sound:	Based on monitoring data (during May 2014, February and July 2016, September 2017, June and September 2018, May 2019, October 2020, and September 2021), "it is unlikely the Umlaas Road Quarry was impacting significantly on any off-site sensitive receptors" (as stated in all survey reports since July 2016). The 2021 survey concluded that; <ul style="list-style-type: none"> • Daytime LA_{eq} noise levels measured at all industrial (Class F) suburban (Class B) sites were below the applicable SANS daytime guideline when the Plant was operational. • Night-time LA_{eq} noise levels measured at all industrial (Class F) sites were below the SANS night-time guideline while the levels measured at the suburban (Class B) site exceeded the applicable SANS guideline - predominant noise sources originated offsite. Noise sources included • vehicle movement along the N3 ~210m east, • birds and • dogs barking at a nearby farmstead ~204m west; noise sources also evident during survey when the plant was not operational.

B) PRELIMINARY IMPACT ASSESSMENT AND CURRENT MANNER OF CONTROL

The summary of activities taking place on-site and the preliminary impact identification and evaluation is provided in order for I&AP to identify potential impacts that have been missed and / or to provide input into the ranking of the significance of potential impacts. (Relevant definitions provided on page 4.)

ACTIVITY	ASPECT	IMPACT RANKING (WITHOUT CONTROLS)		MANNER OF CONTROL (NEMA HIERARCHY)	IMPACT RANKING (WITH CONTROLS)
1. Planning					
- Planning for the stripping and stockpiling of overburden - Planning of mining (mineral utilisation)	All environmental parameters	Not ranked as it varies for each activity being planned		Avoid and Manage and Mitigate	
	Mineral resources				
2. Mining 3. Crushing and Screening					
Mining: - Stripping of vegetation / topsoil / overburden - Drilling and blasting of overburden - Materials handling and stockpiling of topsoil / overburden - Drilling and blasting of mineral resource - Materials handling of blasted rock - Vehicle entrainment Plant: - Crushing and screening - Materials handling of aggregate - Vehicle entrainment	Vegetation / Ecology	Neg	High to Medium-high	Manage	High to Medium-high
	Topsoil	Neg	Medium	Mitigate	Low-medium
	Visual	Neg	Medium-high	Manage	Medium
	Vibration and Flyrock	Neg	Low-medium	Avoid and Manage and Mitigate	Low
	Air Quality	Neg	Medium to Low	Avoid and Manage	Low-medium to Low
	Noise	Neg	Medium-high	Avoid and Manage	Low-medium
	Ground water volumes	Neg	Low-medium	Manage	Low-medium
	Ground water pollution	Neg	Low	Manage	Low
	Surface water volume	Neg	Medium	Avoid	Medium
	Surface water pollution	Neg	Low	Avoid	Low
	Erosion of soil	Neg	Medium	Avoid and Manage	Low-medium
	Pollution of soil and water (from hydrocarbons)	Neg	Low-medium	Avoid	Low
	Illumination	Neg	Medium	Avoid	Low-medium
Mobile Plant: - Crushing and screening - Materials handling of aggregate	Noise	Neg	Medium	Avoid	Low-medium
	Air Quality	Neg	Low	Avoid and Manage	Low
4. Supporting Services					
- Roads (use and maintenance) - Power (electricity and fuel) - Water supply - Plant and vehicle maintenance (including storage and use of hydrocarbons) - Waste management - Storm water management - Administration - Training	Public safety	Neg	Medium	Avoid	Medium
	Carbon emissions	Neg	High	Manage	Medium
	Water volumes (use)	Neg	Medium	Avoid	Low-medium
	Pollution of soil / surface water / ground water	Neg	Medium to Low	Avoid and Manage	Low-medium to Low
	Surface water volume	Pos	+ Low	Avoid	+ Low
	Documentation / Records	Pos	Not ranked as it varies depending on the associated aspect	Manage	
	Relating to "Admin & Training"	Pos		Manage	

ACTIVITY	ASPECT	IMPACT RANKING (WITHOUT CONTROLS)		MANNER OF CONTROL (NEMA HIERARCHY)	IMPACT RANKING (WITH CONTROLS)
5. Emergency Incidents					
- Hydrocarbon Spills	Pollution of soil / surface water / ground water	Neg	Not ranked as it varies depending on the extent and / or location of the incident	Manage and Mitigate	
- Fire	Air quality	Neg		Avoid and Manage	
6. Socio-economic					
- Job creation - Providing aggregates for the construction industry	Employment	Pos	+ High	The positive impacts are a natural consequence of the mine and no Manner of Control is included as these "aspects" are better managed through more appropriate means	
	Raw materials	Pos	+ High		
7. Concurrent Rehabilitation					
- Storage of topsoil	Topsoil	Pos	+ Medium-high	Manage	
- Constructing a visual screen (vegetation)	Visual	Pos	+ Medium-high	Mitigate	
- Vegetation of overburden stockpiles / berms	Vegetation / Ecology	Pos	+ Low-medium	Manage	
	Visual	Pos	+ Medium-high	Manage	
	Soil erosion	Pos	+ Low-medium	Manage	
- Alien vegetation control	Alien vegetation	Pos	+ Medium	Manage and Mitigate	

DEFINITIONS

Impact Ranking	
Low:	<i>Objective:</i> To ensure the significance ranking does not increase. <i>Outcome:</i> To maintain a low significance ranking. Although management actions may not be necessary, in some instances they may be encouraged to ensure the outcome is achieved.
Low-Medium:	<i>Objective:</i> To ensure the significance ranking does not increase. <i>Outcome:</i> To maintain a low-medium significance ranking. Although management actions may not always be necessary, in most instances they will be encouraged to ensure the outcome is achieved.
Medium:	<i>Objective:</i> To ensure the significance ranking does not increase. <i>Outcome:</i> To reduce either the probability or consequence of the impact and aim for achieving a low-medium significance ranking. Mitigation or management actions will be necessary to ensure the outcome is achieved.

Impact Ranking	
Medium-High:	<i>Objective:</i> To reduce the significance ranking. <i>Outcome:</i> To reduce either the probability or consequence of the impact and aim for achieving a medium or lower significance ranking. Where possible activities causing the impact / risk will be avoided and if not possible, mitigation and / or management actions will be necessary to ensure the outcome is achieved.
High:	<i>Objective:</i> To reduce the significance ranking. <i>Outcome:</i> To reduce either the probability or consequence of the impact and aim for achieving a medium or lower significance ranking. Where possible activities causing the impact / risk will be avoided and if not possible, mitigation and / or management actions will be necessary to ensure the outcome is achieved.

Manner of Control	
Avoid:	Impact Management Actions ensure that the identified potential negative impact does not occur.
Manage:	Minimise (for negative impacts) / Enhance (for positive impacts) the significance of the identified potential impact by undertaking specific Impact Management Actions.
Mitigate:	After an impact has occurred, implement Impact Management Actions to reduce the significance of the negative impact that has occurred.

C) I&AP INVOLVEMENT

A description of the Public Participation Process has been presented to the DMRE and accepted (available on the Umhlaba web-site – www.umhlaba.co.za).

Interested and Affected Parties (I&APs) have been identified considering; • this is an existing operation (which began in 1968), • the scale of the activities on-site, • the nature of the activities being undertaken in the surrounding area, • the proximity of the neighbours to mining activities, • that no change in impacts has occurred to trigger the EMPr amendment, and • interest shown during the 2016, 2018 and 2021 consultation processes.

Electronic communication will be used as the primary form of communication unless otherwise requested by the I&AP.

Your Involvement.

1. Acknowledge receipt of this BID by registering / confirming registration as an I&AP – by either,
 - ⇒ filling in your details online (www.umhlaba.co.za), or
 - ⇒ e-mailing your details* to Umhlaba (Lynn@umhlaba.co.za / Info@umhlaba.co.za) and providing the following information
 - Name
 - Telephone number (preferably a cell number to allow SMS notifications)
 - E-mail address
 - Interest in the project
 - Confirmation that you would like to be notified when the EMPr amendment report is available for public review
2. If you have input based on the information in the BID, complete the attached form or send your comments via e-mail including the details listed above*.
3. Review the draft revised EMPr when it is circulated for public comment (late June / early July), providing feedback to Umhlaba* within 30 days of the documents being made available.
4. Review the final revised EMPr when it is submitted to the DMRE, providing feedback to the DMRE, if your concerns previously raised have not been addressed adequately or if you have additional comments.

* Please note that by making your information available to Umhlaba, you authorise Umhlaba to use your information for the purpose in which it has been requested and that we will provide these details to the Competent Authority upon submission of the Final Report.