



REFERENCE: 16/3/3/1/F3/10/3030/18
ENQUIRIES: Ms. M. Schippers
DATE OF ISSUE: 2018 -11- 12

The Director
Minrite (Pty) Ltd.
14 Park Lane
CENTURY CITY
7441

Attention: Mr. M. Calitz

Tel: (027) 217 2034
Fax: (027) 217 2822

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE PROPOSED EXPANSION OF THE MINRITE PROCESSING PLANT, THE INSTALLATION OF ADDITIONAL TANKS FOR THE STORAGE OF DANGEROUS GOODS AND ASSOCIATED INFRASTRUCTURE ON THE REMAINDER OF ERF 405, LUTZVILLE.

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the decision on the application, that all registered interested and affected parties ("I&APs") are provided with access to the decision and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation.

Yours faithfully

ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) Ms. L. Alston (Sillito Environmental Consulting)
(2) Mr. B. Smit (Matzikama Municipality)

Fax: (021) 712 5061
Fax: (027) 213 3238



EIA REFERENCE NUMBER: 16/3/3/1/F3/10/3030/18
NEAS REFERENCE: WCP/EIA/0000457/2018
ENQUIRIES: Ms. M. Schippers
DATE OF ISSUE:

2018 -11- 12

ENVIRONMENTAL AUTHORISATION

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED) FOR THE PROPOSED EXPANSION OF THE MINRITE PROCESSING PLANT, THE INSTALLATION OF ADDITIONAL TANKS FOR THE STORAGE OF DANGEROUS GOODS AND ASSOCIATED INFRASTRUCTURE ON THE REMAINDER OF ERF 405, LUTZVILLE.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998), the Environmental Impact Assessment Regulations, 2014 as amended on 07 April 2017 ("NEMA EIA Regulations, 2014") the competent authority herewith **grants environmental authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the preferred alternative described in the Final Basic Assessment Report ("BAR") dated 08 October 2018.

The granting of this environmental authorisation is subject to compliance with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Minrite (Pty) Ltd.
c/o Mr. M. Calitz
14 Park Lane
CENTURY CITY
7441

Tel: (027) 217 2034
Fax: (027) 217 2822

The abovementioned company is the holder of this environmental authorisation and is hereinafter referred to as "the applicant".

B. LISTED ACTIVITIES AUTHORISED

The listed activities in terms of the NEMA EIA Regulations as amended on 07 April 2017.

Listed activities	Activity/Project description
<p>Listing Notice 1 of the NEMA EIA Regulations, 2014 (as amended):</p> <p>Activity Number: 34 Activity Description:</p> <p>The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution, excluding—</p> <ul style="list-style-type: none"> (i) where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; (ii) the expansion of existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or (iii) the expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic meters or less per day. 	<p>The proposed developed will entail a variation of the Provisional Air Emissions License to accommodate the expansion of the existing facility.</p>
<p>Listing Notice 1 of the NEMA EIA Regulations, 2014 (as amended):</p> <p>Activity Number: 67 Activity Description:</p> <p>Phased activities for all activities—</p> <ul style="list-style-type: none"> (i) listed in this Notice, which commenced on or after the effective date of this Notice or similarly listed in any of the previous NEMA notices, which commenced on or after the effective date of such previous NEMA Notices; 	<p>The proposed development will entail the installation of additional tanks for the storage of dangerous goods with a combined capacity of approximately 96m³. The capacity will increase from 50m³ to 96m³.</p>

<p>excluding the following activities listed in this Notice-</p> <p>17(i)(a-d); 17(ii)(a-d); 17(iii)(a-d); 17(iv)(a-d); 17(v)(a-d); 20; 21; 22; 24(i); 29; 30; 31; 32; 34; 54(i)(a-d); 54(ii)(a-d); 54(iii)(a-d); 54(iv)(a-d); 54(v)(a-d); 55; 61; 64; and 65; or</p> <p>(ii) listed as activities 5, 7, 8(ii), 11, 13, 16, 27(i) or 27(ii) in Listing Notice 2 of 2014 or similarly listed in any of the previous NEMA notices, which commenced on or after the effective date of such previous NEMA Notices;</p> <p>where any phase of the activity was below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold.</p>	
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The abovementioned is hereinafter referred to as "the listed activities".

The applicant is herein authorised to undertake the following alternative related to the listed activities:

The proposed activity entails the expansion of the existing mineral processing plant, the installation of additional tanks for the storage of dangerous goods and associated infrastructure on the Remainder of Erf 405, Lutzville. The existing mineral processing plant will increase its design capacity for the processing of minerals from 6 000 tons per month to 24 000 tons per month and this requires a variation of the existing Provisional Air Emission License. The existing plant currently has 2 x 23 000L fuel storage tanks, 1 x 2 000L paraffin tank and 1 x 2 000L diesel tank. Two additional tanks of 23 000L each will be installed for the storage of Industrial burning oil and light oil. The associated infrastructure will include, *inter alia*, the development and installation of offices, conveyors, feed hoppers, loading areas, workshops, a laboratory, packaging areas, a mineral separation plant, sheds, parking areas, internal roads, waste bunkers, a surge bin, storage areas, additional dryers and abatement technology.

Dry mineral separation methods and rare earth drum separators will be used to separate the minerals. In order to minimise noise impacts as a result of the additional dryers that are required, circular duct attenuators will be installed on the dryer fans and the dust extraction fans. To minimise particulate matter emissions into the atmosphere cyclone and bag filters will be installed on the dryers.

The total footprint of the existing facility and the expansion will be approximately 3617.8m². Existing access will be utilised.

C. PROPERTY DESCRIPTION AND LOCATION

The listed activities will take place on the Remainder of Erf 405, Lutzville.

The SG 21 digit code is: C07800050000040500000

Co-ordinates of the site:

31° 32' 58.03" South
18° 21' 06.23" East

Refer to Annexure 1: Locality Map and Annexure 2: Site Plan

hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Sillito Environmental Consultants
c/o Ms. L. Alston
P. O. Box 30134
TOKAI
7966

Tel: (021) 712 5060
Fax: (021) 712 5061

E. CONDITIONS OF AUTHORISATION

Scope of Authorisation

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the preferred Alternative described in the BAR dated 08 October 2018 on the site as described in Section C above.
2. The holder must commence with the listed activities within the stipulated validity period which this Environmental Authorisation is granted for, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the competent authority.
3. This Environmental Authorisation is granted for–
 - 3.1. A period of five (5) years, from the date of issue, during which period the holder must commence with the authorised listed activities; and
 - 3.2. A period of ten (10) years, from the date the holder commenced with the authorised listed activities, during which period the authorised listed activities for the development phase, must be concluded.

4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
5. Any changes to, or deviations from the scope of the preferred alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

6. A minimum of seven calendar days notice, in writing, must be given to the competent authority before commencement of the development phase.
 - 6.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 6.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 7 and 13.

Notification and administration of appeal

7. The applicant must in writing, within 14 (fourteen) calendar days of the date of this decision and in accordance with Regulation 4 (2) –
 - 7.1. Notify all registered interested and affected parties of –
 - 7.1.1. the outcome of the application;
 - 7.1.2. the reasons for the decision as included in Annexure 3;
 - 7.1.3. the date of the decision; and
 - 7.1.4. the date of issue of the decision;
 - 7.2. Draw the attention of all registered interested and affected parties to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 detailed in section F below;
 - 7.3. Draw the attention of all registered interested and affected parties to the manner in which they may access the decision;
 - 7.4. Provide the registered Interested and Affected Parties with-
 - 7.4.1. the name of the holder (entity) of this environmental authorisation;
 - 7.4.2. the name of the responsible person for this environmental authorisation;
 - 7.4.3. the postal address of the holder;
 - 7.4.4. the telephonic and fax details of the holder;
 - 7.4.5. the e-mail address if any; and
 - 7.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations.

Commencement

8. The listed activities, including site preparation, must not be commenced with within twenty (20) calendar days from the date the applicant notified the registered I&APs of this decision.
9. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided.

Management of activity

10. The draft Environmental Management Programme ("EMPr") submitted as part of the application for environmental authorisation is hereby approved and must be implemented.
11. An application for amendment to the EMPr must be submitted to the competent authority if any amendments are to be made to the EMPr, and this may only be implemented once the amended EMPr has been authorised by the competent authority.
12. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

13. The holder must appoint a suitably experienced Environmental Control Officer ("ECO"), or site agent where appropriate to ensure compliance with the EMPr and the conditions contained herein.
14. A copy of the environmental authorisation and the EMPr, audit reports and compliance monitoring reports must be kept at the site and must be made available to anyone on request.
15. Access to the site referred to in section C above must be granted and, the environmental authorisation and EMPr must be produced to any authorised official representing the competent authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The environmental authorisation and EMPr must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.

Auditing

17. In terms of Regulation 34 of the NEMA EIA Regulations, 2014, the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority.
 - 17.1. The audit reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).
 - 17.2. A first audit report must be submitted to the Competent Authority within three (3) months of the commencement of the development phase.
 - 17.3. A final audit report must be submitted to the competent authority within one (1) year of the operations commencing;

- 17.4. The audit reports must indicate compliance status with the conditions of this environmental authorisation, and the EMPr and make recommendations for improved environmental management;
- 17.5. The holder must, within 7 days of the submission of an audit report to the Competent Authority, notify potential and registered I&APs of the submission and make the report available to anyone on request; and
- 17.6. If the audit reports are not submitted, the competent authority may give 30 days written notice and may have such an audit undertaken at the expense of the applicant and may authorise any person to take such measures necessary for this purpose.

Specific conditions

18. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation.
19. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include: archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings and graves or unmarked human burials.
20. A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.
21. Relevant signage must be erected at the facility warning staff and visitors of the hazards in relation to the goods stored on site.
22. The storage tanks must be designed, installed and managed in accordance with international standards pertaining to *inter alia*:
 - 22.1. aboveground tanks and pipe installations; and
 - 22.2. tank manufacturer standards.
23. The aboveground storage tanks ("AST's") must be bunded (110% of the AST's volume) to contain any possible spills and the floor of the bund area must be impervious to prevent contamination.
24. Internationally approved non-corrosive pipework systems must be used.
25. Corrosion resistant tanks and non-corrosive pipes must be used and must conform to the relevant international standards.
26. The tanks must be fitted with overfill protection detectors to prevent tank overfills during filling operations.
27. During fuel delivery, a delivery supervisor must be present at all times during product offloading.

28. Adequate fire-fighting equipment must be present on site and must adhere to the internationally accepted standards.
29. Adequate training of all on-site personnel must be done to ensure that the conditions of the EA and the EMPr requirements are complied with.
30. All noise and sounds generated during development and operation must comply with the relevant SANS codes and standards and the relevant noise regulations.
31. The recommendation as included in Section 5.1 of the Noise Impact Assessment Report (dated 16 July 2018 and compiled by Mackenzie Hoy Consulting Acoustics Engineers) (Attached as Appendix A) must be implemented.
32. The recommended mitigation measures as included in Table 6.1. of the Air Dispersion Modelling Report (dated 26 July 2018 and compiled by WardKarlson Consulting Group) (attached as Appendix B) must be implemented.

F. GENERAL MATTERS

1. The holder is responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
2. Any changes to, or deviations from the scope of the description set out in section B above must be accepted or approved, in writing, by the competent authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the competent authority may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.
3. The applicant must notify the competent authority in writing, within 24 hours thereof if any condition herein stipulated is not being complied with.
4. The applicant must submit an application for amendment in terms of Chapter 5 of the NEMA EIA Regulations, 2014 (as amended) of the environmental authorisation to the competent authority where any detail or scope with respect to the environmental authorisation must be amended, added, substituted, corrected, removed or updated.
5. Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the competent authority must only be notified of such changes.
6. Non-compliance with a condition of this environmental authorisation or EMPr may result in suspension of this environmental authorisation and may render the holder liable for criminal prosecution.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014.

1. An appellant (if the holder) must –
 - 1.1. Submit an appeal in accordance with Regulation 4 to the Appeal Administrator and a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision maker within 20 (twenty) calendar days from the date the holder was notified by the Competent Authority of this decision:
2. An appellant (if NOT the holder) must –
 - 2.1. Submit an appeal in accordance with Regulation 4 to the Appeal Administrator, and a copy of the appeal to the holder, any registered I&AP, any Organ of State with interest in the matter and the decision maker within 20 (twenty) calendar days from the date the holder notified the registered I&APs of the this decision:
3. The holder (if not the appellant), the decision-maker, I&AP and Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. This appeal and responding statement must be submitted to the address listed below:

By post: Western Cape Ministry of Local Government, Environmental Affairs and Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Jaap de Villiers (Tel: 021 483 3721)
Room 809, 8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: You are also requested to submit an electronic copy (Microsoft Word format) of the appeal and any supporting documents to the Appeal Administrator to the address listed above and/ or via e-mail to Jaap.DeVilliers@westerncape.gov.za.
5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from the office of the Minister at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

H. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this environmental authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where development or operation subsequent to development is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



MR. ZAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 12/11/2018

Copies to: (1) Ms. L. Alston (Sillito Environmental Consultants)
(2) Mr. B. Smith (Matzikama Municipality)

Fax: (021) 712 5061
Fax: (027) 213 3238

FOR OFFICIAL USE ONLY:

EIA REFERENCE NUMBER:

16/3/3/1/F3/10/3030/18

NEAS EIA REFERENCE NUMBER:

WCP/EIA/0000457/2018

Minrite Processing Facility Lo

Locality Map

Legend

-  Lutzville
-  Minrite Pty Ltd



Google Earth

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ANNEXURE 1: LOCALITY MAP

ANNEXURE 2: SITE PLAN

Minrite Map

2018

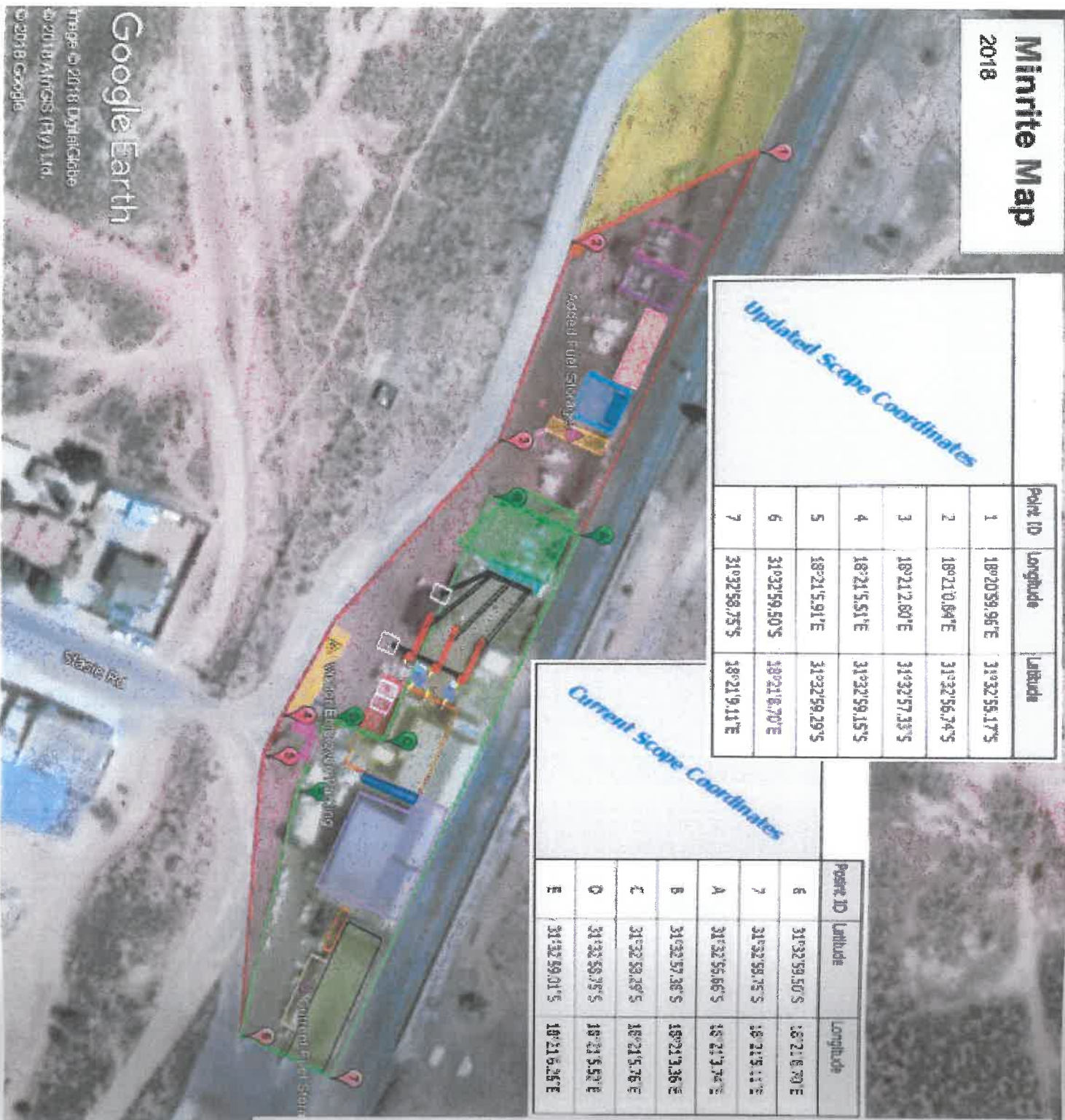
Updated Scope Coordinates

Point ID	Longitude	Latitude
1	18°20'59.96"E	31°32'55.17"S
2	18°21'0.84"E	31°32'56.74"S
3	18°21'2.80"E	31°32'57.33"S
4	18°21'5.51"E	31°32'59.15"S
5	18°21'5.91"E	31°32'59.29"S
6	31°32'59.50"S	18°21'8.70"E
7	31°32'58.75"S	18°21'9.11"E

Current Scope Coordinates

Point ID	Latitude	Longitude
6	31°32'59.50"S	18°21'8.70"E
7	31°32'59.75"S	18°21'9.11"E
A	31°32'55.66"S	18°21'3.74"E
B	31°32'57.36"S	18°21'3.36"E
C	31°32'59.29"S	18°21'5.76"E
D	31°32'59.75"S	18°21'5.57"E
E	31°32'59.01"S	18°21'6.25"E

- Legend**
- Abution 1
 - All Fuel Storage
 - Current Fuel Storage
 - Current Minrite Site-Outline
 - Current Processing+BaggingFacility
 - Extended Laboratory
 - Feed Hopper Access Ramp
 - Lutzuville
 - New Change-house+Laundry
 - New Conveyors
 - New Expanded Area
 - New Feed Hoppers
 - New Greenroom
 - New Mechanical Workshop
 - New Offices
 - New Product Coolers
 - New Rotary Kiln Driers
 - New Salvag Yard 1
 - New Salvag Yard 2
 - New SurlagBlins
 - New Visitor/Employee Parking
 - New Waste Burkers



Google Earth

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ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the competent authority, *inter alia*, considered the following:

- a) The listed activities applicable in terms of the NEMA EIA Regulations as amended on 07 April 2017.
- b) The information contained in the application form dated 13 August 2018 and received by the competent authority on 14 August 2018, the BAR received by the competent authority on 12 October 2018 and the EMPr submitted together with the BAR and the additional information (assessment of potential soil and groundwater impacts during the operational phase) received on 07 November 2018;
- c) The assessment of the activities in the BAR received by the competent authority on 12 October 2018;
- d) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Exemptions (dated March 2013);
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- f) The comments received from interested and affected parties and the responses provided thereon, as included in the BAR received by the Department on 12 October 2018; and
- g) No site visits were conducted. The competent authority had sufficient information before it to make an informed decision without conducting a site visit.

All information presented to the competent authority was taken into account in the consideration of the application for environmental authorisation. A summary of the issues which, according to the competent authority, were the most significant reasons for the decision, is set out below.

1. Public Participation

The public participation process ("PPP") included, *inter alia*, the following:

- identification of and engagement with interested and affected parties;
- fixing a notice board at the site where the listed activities are to be undertaken;
- giving written notice to the owners of the land and owners and occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities; and
- the placing of a newspaper advertisement in the 'Die Burger' and the 'Ons Kontrei' on 17 August 2018, respectively.

The Department is satisfied that the PPP that was followed met the minimum legal requirements and all the comments raised and responses thereto were included in the comments and response report.

Specific management and mitigation measures have been considered in this environmental authorisation and in the EMPr to adequately address significant concerns raised.

2. Alternatives

Preferred Alternative (herewith authorised)

Various alternatives were investigated with respect to minimising potential noise impacts, emissions into the atmosphere and methods to separate minerals.

The preferred alternative entails the expansion of the existing mineral processing plant, the installation of additional tanks for the storage of dangerous goods and associated infrastructure on the Remainder of Erf 405, Lutzville. The existing mineral processing plant will increase its design capacity for the processing of minerals from 6 000 tons per month to 24 000 tons per month and this requires a variation to the existing Provisional Air Emission License. The existing plant currently has 2 x 23 000L fuel storage tanks, 1 x 2 000L paraffin tank and 1 x 2 000L diesel tank. Two additional tanks of 23 000L each will be installed for the storage of Industrial burning oil and light oil. The associated infrastructure will include, inter alia, the development and installation of offices, conveyors, feed hoppers, loading areas, workshops, a laboratory, packaging areas, a mineral separation plant, sheds, parking areas, internal roads, waste bunkers, a surge bin, storage areas, additional dryers and abatement technology.

Dry mineral separation methods and rare earth drum separators will be used to separate the minerals. In order to minimise noise impacts as a result of the additional dryers that are required, circular duct attenuators will be installed on the dryer fans and the dust extraction fans. To minimise particulate matter emissions into the atmosphere cyclone and bag filters will be installed on the dryers.

"No-Go" Alternative

The "no-go" alternative will result in the status quo being maintained. The preferred alternative will not result in unacceptable environmental impacts, therefore the "no-go" alternative was not warranted.

3. Impacts, assessment and mitigation measures

3.1. Activity Need and Desirability

The proposed development is an expansion of the existing facility and no additional services or infrastructure is required from the local authority. The applicant has entered into an agreement with an existing mining company to accept additional mineral concentrate to be processed at the existing facility. The applicant therefore needs to expand the facility in order to accommodate the additional processing capacity.

3.2. Biophysical Environment

No natural vegetation occurs on the site as it has been transformed due to the existing activities on the site. No watercourses are located on or in close proximity to the site. Best-practice technology and design specifications for the storage tanks and the dryers will be utilised to ensure that potential impacts on the environment are minimised.

3.3. Air Quality Impacts

According to the Air Dispersion Modelling Report (dated 26 July 2018 and compiled by WardKarlson Consulting Group) the modelling assessment predicted that the operation of the facility is not anticipated to cause non-compliance of the relevant NO₂, SO₂, PM₁₀ and PM_{2.5} emissions in terms of the National Ambient Air Quality Standards ("NAAQS"). Further, there are no predicted exceedances of any of the relevant NAAQS at the project boundary or beyond for the modelled scenarios. Potential air quality impacts will be minimised with the implementation of the mitigation measures included in the conditions of this environmental authorisation and the EMPr.

3.4. Noise Impacts

According to the Noise Impact Assessment (dated 16 July 2018 and compiled by Mackenzie Hoy Consulting Acoustics Engineers) the predicted noise contribution as a result of the expansion of the existing facility will not exceed the maximum applicable day time and night time limits in terms of the Western Cape Noise Control Regulations if the proposed mitigation measures are implemented. Noise impacts will be mitigated by the implementation of the conditions in this environmental authorisation and the EMPr.

3.5. Soil and Groundwater Contamination Impacts

Potential soil and groundwater contamination may occur during the development and operational phase of the proposed development as a result of potential on-site spills which may occur and potential leakages of the tanks and pipes. Potential soil and groundwater impacts will be minimised with the implementation of the mitigation measures included in the conditions of this environmental authorisation and the EMPr.

3.6. Risks/ Health and safety impacts

The main hazards associated with the proposed storage tanks are fires and explosions, due to the flammability of the product to be stored on the site. Potential leakages of the tanks, faulty pipework and potential loss of product during operations may result in fires and explosions. Due to the precautions that will be taken, these potential impacts on the environment will be minimised.

3.7. Traffic Impacts

An increase in traffic is expected to occur as a result of delivering materials to the site and taking waste material away from the site. According to the Transport Impact Statement (dated June 2018 and compiled by EFG Engineers (Pty) Ltd.) the existing traffic along the affected public roads is low for the particular class of road and sufficient spare capacity is available to accommodate the additional trips generated by the proposed expansions. The additional 23 trips are considered to be an insignificant traffic impact.

3.8. Impact Assessment and significance rating

- 3.8.1. Potential air quality impacts during development and operation has been identified in the BAR as being of low and low-medium negative significance, respectively, after mitigation. Potential impacts will be mitigated by the implementation of the EMPr and conditions of this environmental authorisation.
- 3.8.2. Potential noise impacts during development and operation has been identified in the BAR as being of low negative significance after mitigation. Potential impacts will be mitigated by the implementation of the EMPr and conditions of this environmental authorisation.
- 3.8.3. Potential soil and groundwater contamination during development and operation has been identified in the BAR as being of low negative significance after mitigation. Potential impacts will be mitigated by the implementation of the EMPr and conditions of this environmental authorisation.
- 3.8.4. The potential fire and explosion risks, due to the flammability of product to be stored on the site has been identified in the BAR as being of low negative significance after mitigation. The potential impacts will be mitigated by the implementation of the conditions of the environmental authorisation and the EMPr.

3.8.5. Potential traffic impacts during development and operation has been identified in the BAR as being of low negative significance after mitigation. Potential impacts will be mitigated by the implementation of the EMPr and conditions of this environmental authorisation.

National Environmental Management Act Principles

The National Environmental Management Act Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

The development will result in both negative and positive impacts.

Negative Impacts Include:

- Potential air quality impacts;
- Potential soil and groundwater contamination;
- Potential fire and explosion hazards; and
- Potential noise impacts.

Positive impacts include:

- The proposed development will create some temporary and permanent employment opportunities; and
- Economic benefits.

In view of the above, the NEMA principles, compliance with the conditions stipulated in this environmental authorisation, and compliance with the EMPr, the competent authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

-END-

APPENDIX A

Recommendation as included in Section 5 of the Noise Impact Assessment

5. Conclusions and Recommendations

- 5.1. It is recommended that Minrite Lutzville Plant Expansion install circular duct attenuators on the dryer fans and the dust extraction fans. The recommended circular duct attenuators to be installed must provide the following minimum attenuation requirements:

Table 6: Minimum attenuation specification for Minrite Lutzville Plant fans.

63 Hz	125 Hz	250Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
4 dB	6 dB	9 dB	14 dB	21 dB	19 dB	16 dB	13 dB

- 5.2. The overall conclusion of the investigation undertaken by Mackenzie Hoy Consulting Engineers is that Minrite Lutzville Plant Expansion would only be acceptable in terms of the Western Cape Noise Control Regulations, 2013 provided the following:
- i. The layout of the proposed plant expansion as specified in this report is unchanged.
 - ii. The summarised recommendations specified in this Noise Impact Assessment are implemented.
 - iii. The assumptions stated in this report are accepted as true and correct.



Eng. T.E. Mackenzie Hoy Pr. Eng Bsc (Elec)

Registered professional engineer number 840428

for: Mackenzie Hoy Consulting Acoustics Engineers

T.E. Mackenzie-Hoy Pr. Eng. Bsc (Elec) M.S.A.I.E.E., M.S.P.E., IngP (Eur), AmASA (Director)
Rachel Viljoen BEng (Mechatronics), T. Matora BSc (Mechatronics), M. Attwood (Adv Dip S.Eng)

APPENDIX B

Recommendations as included in the Air Dispersion Modelling Report

6 Dust and Pollution Management and Control

The expansion to the facility has the potential to result in increased concentrations of gaseous pollutants, dust and particulate matter. Although abatement will be integrated into the concept design basis, further mitigation measures can be investigated and subsequently integrated into operations of the Project where technically and economically feasible. Key mitigation measures are provided in Table 6-1.

Table 6-1 – Mitigation Measures for the Facility's Emissions

Source of PM Emissions	Recommended Mitigation Measure
Emissions from the operation of four rotary driers	<ul style="list-style-type: none"> • The facility should ensure that the new driers are designed on the basis of a vendor guarantee to meet the emission limits for PM (50 mg/Nm³) [2]. This will require the installation of abatement technology (such as bag filters) in order to guarantee compliance with the minimum emission standards for PM. In the event that the new driers not meet the regulated limits, this will raise non-compliance with the operating conditions stipulated within the P/AEL. • Ensure that the new driers have the same emission performance as the current drier in terms of NO₂ and SO₂ • Conduct stack testing annually on all four driers to measure stack concentrations of PM, NO₂ and SO₂. • Continuation of dust fallout monitoring programmes (through the use of fallout gauges); • Incorporation of dust suppression and other proactive site management practices. Visual inspection should be undertaken where operational activities cause visible dust beyond the plant boundary (for example in times of prolonged dry periods or high wind speeds). In this case, the activity in question should be halted or alternatively wet suppression any other applicable dust control measure should be applied as necessary. • Road watering on haul routes to minimise dust emissions from vehicle movements on-site. • Update the fugitive emissions management plan with mitigation measures
Dust from fugitive emissions	