

 REFERENCE:
 16/3/3/2/A1/2/3033/21

 NEAS REFERENCE:
 WCP/EIA/0000946/2021

 DATE:
 27 May 2022

The Board of Directors Atlantis Sand Sales (Pty) Ltd P. O. Box 2660 **DURBANVILLE** 7550

Attention: Mr. Deon Villet

Tel.: 021 975 8117 E-mail: diane@atlantissandsales.co.za

Dear Sir

APPLICATION FOR 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): THE PROPOSED ESTABLISHMENT OF A NEW ATLANTIS SANDS SAND DRYING PLANT AND ASSOCIATED INFRASTRUCTURE ON ERVEN 306 AND 307, ATLANTIS.

- 1. With reference to the above application, the Department hereby notifies you of its decision to grant the Environmental Authorisation, attached herewith, together with the reasons for the decision.
- 2. In terms of Regulation 4 of the EIA Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered Interested and Affected Parties ("I&APs") are provided with access to 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 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation.

Yours faithfully

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

Copies to:

- 1) Ms. Colleen McCreadie (The Environmental Practice)
- 2) Mr. Morne Theron (City of Cape Town)
- 3) Mr. Ian Gildenhuys (City of Cape Town)

E-mail: colleen@enviroprac.co.za E-mail: Morne.Theron@capetown.gov.za E-mail: lan.Gildehuys@capetown.gov.za





REFERENCE: 16/3/3/2/A1/2/3033/21 NEAS REFERENCE: WCP/EIA/0000946/2021 DATE: 27 May 2022

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR 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): THE PROPOSED ESTABLISHMENT OF A NEW ATLANTIS SANDS SAND DRYING PLANT AND ASSOCIATED INFRASTRUCTURE ON ERVEN 306 AND 307, ATLANTIS.

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) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), 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 Environmental Impact Assessment ("EIR"), dated February 2022.

The granting of this Environmental Authorisation (hereinafter referred to as the "Environmental Authorisation") is subject to compliance with the conditions set out in Section E below.

A. DETAILS OF THE HOLDER OF THIS ENVIRONMENTAL AUTHORISATION

Atlantis Sand Sales (Pty) Ltd % Mr. Deon Villet P. O. Box 2660 **DURBANVILLE** 7550

Tel.: 021 975 8117 E-mail: diane@atlantissandsales.co.za

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**".



B. AUTHORISED ACTIVITIES

| Listed Activity | Activity/Project Description |
|--|---|
| Listing Notice 2 of the EIA Regulations, 2014 (as amended)- | |
| Activity Number: 6 | |
| "The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution, or effluent, excluding- | The development requires an Air Emissions Licence in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004). |
| i) activities which are identified and included in Listing Notice 1 of 2014; ii) activities which are 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; iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day." | |
| Listing Notice 3 of the EIA Regulations, 2014 (as amended)- | |
| Activity Number: 12 | |
| The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. | The proposed development will result in the l of more than 300m ² of critically endanged Atlantis Sand Fynbos. |
| i. Western Cape i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is | |



| the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; | |
|---|--|
| iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or | |
| v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister. | |

The abovementioned list is hereinafter referred to as "the listed activities".

The holder is herein authorised to undertake the following alternative that includes the listed activities related to the development:

The proposed development entails the establishment of a sand drying plant and associated infrastructure on Erf No. 306 and 307, Atlantis, which includes the following components:

- A combustion-heated dryer for the drying of sand to the client's specifications. The dryer will have a throughput design capacity of at least 100 tons/month of sand. The dryer includes an appropriate enclosure and emissions abatement system.
- A three-sided bunker with sides made of shade netting will be established for the storage of raw material (moist sand).
- Silos for dried sand storage prior to loading and distribution. The dryer will feed 'dried' sand via an enclosed conveyor, directly to the storage silos. The sand will be offloaded via chutes directly to trucks.
- Fuel storage tanks (less than 20m³) will be installed directly adjacent to the dryer for ease of refuelling the dryer.
- Clearing and surfacing of Erf No. 307, and establishing infrastructure related to the drying plant and Atlantis Sand Sales' workshop and office activities, on the site. Site surfacing will include paved roads, unpaved roads and some remaining sandy surfaces where vehicles and equipment will not regularly traverse; and
- The air emissions scrubber system to be located adjacent to the dryer enclosure with a stack of about 5.5m in height.

The development footprint will be approximately 7743m².

Covered trucks delivering moist sand to the plant and distributing dried sand from the plant to customers, will access the site via the existing access point at No. 133 Neil Hare Drive.

C. SITE DESCRIPTION AND LOCATION

The proposed Atlantis Sand Sales' new sand drying plant is located on Erf No. 306 and 307, Atlantis, at No. 133 and No. 133A Neil Hare Drive in Atlantis Industria.

The site co-ordinates:

| Latitude (S) | 33° | 36' | 27.9" |
|---------------|-----|-----|-------|
| Longitude (E) | 18° | 28' | 19.7" |

The SG digit code:

| Erf No. 306, Atlantis | C01600870000030600000 |
|-----------------------|-----------------------|
| Erf No. 307, Atlantis | C01600870000030700000 |

The above is hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

The Environmental Practice % Ms. Colleen McCreadie 23 Dartmouth Road **MUIZENBERG** 7945

Tel.: 083 695 1664 E-mail: colleen@enviroprac.co.za

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 EIR dated February 2022 on the site as described in Section C above.
- 2. Authorisation for the activities is subject to compliance with the conditions set out in this Environmental Authorisation. The holder must ensure 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.
- 3. The holder must commence with, and conclude, 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.

This Environmental Authorisation is granted for-

- a) A period of five (5) years, from the date of issue, during which period the holder must commence with the authorised listed activities; and
- b) A period of ten (5) years, from the date the holder commenced with the authorised listed activities, must be concluded.
- 4. The authorised activities must only be carried out at the site described in Section C above in terms of the approved "Environmental Management Programme" ("EMPr").
- 5. Any changes to, or deviations from the scope of the description set out in Section B and Condition 2 above must be 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 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.

Notification of authorisation and right to appeal

- 6. The holder of the authorisation must in writing, within 14 (fourteen) calendar days of the date of this decision
 - 6.1. notify all registered Interested and Affected Parties of -
 - 6.1.1. the outcome of the application;
 - 6.1.2. the reasons for the decision;

- 6.1.3. the date of the decision; and
- 6.1.4. the date of issue of the decision;
- 6.2. 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 (as amended);
- 6.3. draw the attention of all registered Interested and Affected Parties to the manner in which they may access the decision; and
- 6.4. provide the registered Interested and Affected Parties with:
 - 6.4.1. the name of the holder (entity) of this Environmental Authorisation,
 - 6.4.2. name of the responsible person for this Environmental Authorisation,
 - 6.4.3. postal address of the holder,
 - 6.4.4. telephonic and fax details of the holder,
 - 6.4.5. e-mail address, if any;
 - 6.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered Interested and Affected Parties in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).

Commencement

- 7. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notified the registered Interested and Affected Parties of this decision.
- 8. In the event that an appeal is lodged with the Appeal Administrator, the effect of this Environmental Authorisation is suspended until such time as the appeal is decided. In the instance where an appeal is lodged the holder may not commence with the activities, including site preparation, until such time as the appeal has been finalised and the holder is authorised to do so.

Written notice to the competent authority

- 9. A minimum of 7 (seven) calendar days' notice, in writing, must be given to the competent authority before commencement of construction activities. Commencement for the purpose of this condition includes site preparation.
 - 9.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 9.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 6, 7, 14 and 18

Management of activities

- 10. The draft EMPr (dated February 2022) submitted as part of the application for Environmental Authorisation is herewith approved and must be implemented.
- 11. The EMPr must be included in all contract documentation for all phases of implementation.
- 12. An application for amendment to the EMPr must be submitted to the competent authority in terms of Chapter 5 of the EIA Regulations, 2014 (as amended) if any amendments are to be made to the outcomes of the EMPr, and these may only be implemented once the amended EMPr has been authorised by the competent authority.
- 13. A copy of the Environmental Authorisation and the EMPr must be kept at the site where the listed activities will be undertaken. 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 be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.

Monitoring

- The holder must appoint a suitably experienced Environment Control Officer ("ECO"), for the duration of the land clearing, construction and rehabilitation phases of implementation. The ECO must–
 - 14.1. be appointed prior to the commencement of any land clearing activities and the demarcation of no-go areas;
 - 14.2. ensure compliance with the EMPr and the conditions contained herein; and
 - 14.3. keep record of all activities on site; problems identified; transgressions noted and a task schedule of tasks undertaken by the ECO.

Environmental audit reports

- 15. The holder must, for the period during which the Environmental Authorisation and EMPr remain valid-
 - 15.1. ensure that the compliance with the conditions of the Environmental Authorisation and the EMPr is audited;
 - 15.2. submit at least two environmental audit reports to the competent authority during the construction phase. The holder must submit the first audit report within three (3) months after commencement of the construction phase and another audit report within six (6) months after completion of the construction period; and
 - 15.3. submit an environmental audit report every five (5) years while the Environmental Authorisation remains valid.
- 16. The environmental audit report must be prepared by an independent person and must address the objectives and contain all the information set out in Appendix 7 of the EIA Regulations, 2014 (as amended).

In addition to the above, the environmental audit report, must -

- 16.1. provide verifiable findings, in a structured and systematic manner, on-
 - (a) the level of compliance with the conditions of the Environmental Authorisation and the EMPr and whether this is sufficient or not; and
 - (b) the extent to which the avoidance, management and mitigation measures provided for in the EMPr achieve the objectives and outcomes of the EMPr and highlight whether this is sufficient or not;
- 16.2. identify and assess any new impacts and risks as a result of undertaking the activity;
- 16.3. evaluate the effectiveness of the EMPr;
- 16.4. identify shortcomings in the EMPr;
- 16.5. identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;
- 16.6. indicate the date on which the land clearing and construction work was commenced with and completed or in the case where the development is incomplete, the progress of the development;
- 16.7. include a photographic record of the site applicable to the audit; and
- 16.8. be informed by the ECO reports.
- 17. The holder must, within 7 (seven) calendar days of the submission of the environmental audit report to the competent authority, notify all potential and registered Interested and Affected Parties of the submission and make the report available to anyone on request and, where the holder has such a facility, be placed on a publicly accessible website.



Specific conditions

- 18. A search and rescue operation must be undertaken for the translocation of bulbs and succulents including *Brunsvigia orientalis*, *Lachenalia bulbifera* and one plant of the vygie *Lampranthus explanatus*, prior to any land clearing. The City of Cape Town: Biodiversity Management Branch and CapeNature must be provided 3 months' notice, prior to the commencement of construction, in order to ensure that the search and rescue operation, is undertaken within the appropriate season.
- 19. The total area to be cleared, must be deducted from the land banking component of the Atlantis Industrial Incentives Scheme to mitigate the loss of the indigenous vegetation at a ratio of 1:1 and the holder must secure the offset within 24 months from the date of this decision.
- 20. Surface and ground water must not be polluted due to any actions on the site. The applicable requirements with respect to relevant legislation pertaining to water must be met.
- 21. 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 waste disposal facility licensed in terms of the applicable legislation.
- 22. 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 ("HWC"). 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.

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.

F. GENERAL MATTERS

- 1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
- 2. If the holder does not commence with the listed activities within the period referred to in Condition 3 this Environmental Authorisation shall lapse for the activity, and a new application for Environmental Authorisation must be submitted to the competent authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the competent authority prior to the expiry date of the Environmental Authorisation.
- 3. The holder must submit an application for amendment of the Environmental Authorisation to the competent authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.
 - 3.1. 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.

- 4. The manner and frequency for updating the EMPr is as follows:
 - 4.1. Amendments to the EMPr, must be made in accordance with Regulations 35 to 37 of the EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.
- 5. Non-compliance with any condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

- 1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date notification of the decision was sent to the holder by the competent authority -
 - 1.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 1.2 Submit a copy of the appeal to any registered Interested and Affected Parties, any Organ of State with interest in the matter and the decision-maker *i.e.*, the competent authority that issued the decision.
- 2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered Interested and Affected Parties -
 - 2.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 2.2 Submit a copy of the appeal to the holder of the decision, any registered Interested and Affected Party, any Organ of State with interest in the matter and the decision-maker i.e., the competent authority that issued the decision.
- 3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered Interested and Affected Party and the 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. The appeal and the responding statement must be submitted to the address listed below:

| By post: | Attention: Marius Venter 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 Marius Venter (Tel.: 021 483 3721) Room 809 8 th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001 |

Note: For purposes of electronic database management, you are requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any



supporting documents to the Appeal Authority to the address listed above and/ or via email to DEADP.Appeals@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from the Appeal Authority at: Tel. (021) 483 3721, E-mail <u>DEADP.Appeals@westerncape.gov.za</u> or URL <u>http://www.westerncape.gov.za/eadp</u>.

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 construction or operation subsequent to construction 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 ZAAHIR TOEFY DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

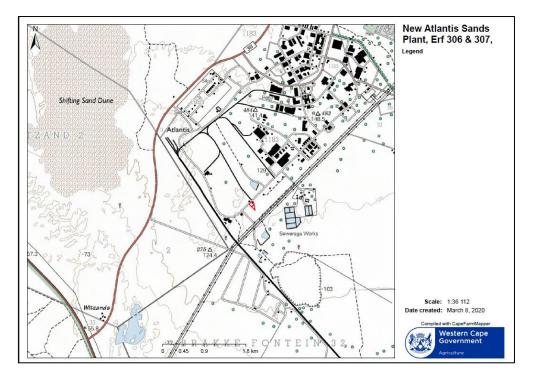
DATE OF DECISION: 27 MAY 2022

Copied to:

- 1. Ms. Colleen McCreadie (The Environmental Practice)
- 2. Mr. Morne Theron (City of Cape Town)
- 3. Mr. Ian Gildenhuys (City of Cape Town)

E-mail: colleen@enviroprac.co.za E-mail: Morne.Theron@capetown.gov.za E-mail: lan.Gildehuys@capetown.gov.za

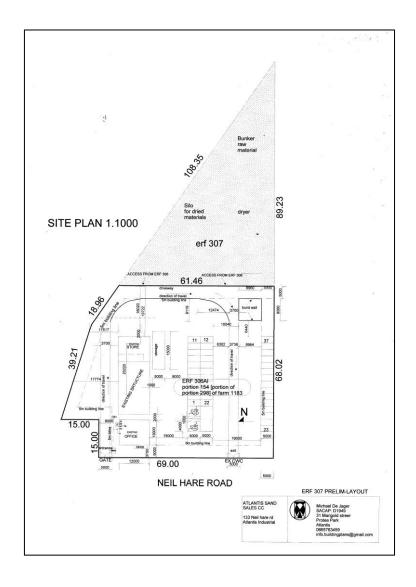
ANNEXURE 1: LOCALITY MAP



Atlantis Sand Sales New Sand Drying Plant: Site Locality Map on Google Earth



ANNEXURE 2: SITE DEVELOPMENT PLAN



ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, inter alia, the following:

- a) The information contained in the Application Form dated 7 July 2021, the final Scoping Report dated 20 August 2021, the final EIR dated February 2022 and the EMPr submitted together with the final EIR;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the NEMA; and
- d) The comments received from Interested and Affected Parties and responses to these, included in the final EIR dated February 2022.

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 that were considered to be the most significant for the decision is set out below.

1. Public Participation

The public participation process included:

- identification of and engagement with Interested and Affected Parties ("I&APs") on 20 January 2021;
- fixing notices at the site where the listed activities will be undertaken on 22 January 2021;
- the placing of a newspaper advertisement in the "Weskus Nuus" and "Cape Times" on 26 January 2021;
- the pre-application draft Scoping Report was made available for public review from 26 January 2021 until 26 February 2021, with an additional commenting period from 10 March 2021 until 14 April 2021;
- E-mail notifications were utilised to notify all potential and registered I&APs including the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities, about the availability of the report with reminders sent to submit comments on 9 July 2021;
- the application phase draft Scoping Report was made available to I&APs for public review and comment from 9 July 2021 until 13 August 2021; and
- the application phase draft EIR was made available to I&APs for public review and comment from 12 November 2021 until 15 December 2021.

During the public participation process, concerns were raised by CapeNature and the City of Town's Environmental and Heritage Resource Management Branch regarding the loss of indigenous vegetation and species of conservation concern. The EAP obtained follow up comments from the botanical specialist in response to the concerns raised. A search and rescue operation will be undertaken prior to the commencement of land clearing activities and a biodiversity offset will be implemented in terms of the City of Cape Town's Atlantis Biodiversity Offset Land Bank Incentive Scheme.

In addition to this, the City of Cape Town's Air Quality Management Branch raised concerns regarding the dust mitigation and abatement technology proposed in the Air Quality Impact Assessment Report. The concerns raised were addressed with recommendations in a follow up correspondence by the air quality specialists, dated 18 January 2022. The mitigation measures recommendations within the EMPr. The impacts associated with the proposed development were adequately assessed and sufficient information was provided for the Competent Authority's decision-making.

Responses to the comments raised during the public participation process were included in both the Scoping as well as EIA Reports. This Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements.

2. Alternatives

The alternatives considered for the proposed development were Site, Activity, Technology and the "Nogo" Alternatives.

Site Alternatives

No other site alternatives were considered and the proposed site alternative, i.e., Erf No. 306 and 307, Atlantis is preferred for the following reasons:

- Proximity to feedstock source, workshop, maintenance offices and established clientele;
- The landowner is the applicant; and
- The properties are zoned as Risk Industry.

Activity Alternatives

Based on an increase in supplier demand, the applicant investigated the addition of a second sand drying plant to expand the production capacity of the business. This alternative is preferred as the proposed new sand drying plant is aligned with the surrounding land use activities and from an operational aspect, the proposed sand drying plant allows the proponent to remain competitive within the sand supply industry.

Technology Alternatives

The applicant has investigated the technology of Emissions Abatement Systems Technology. Emissions from the dryer, therefore, need to be treated in some way to reduce pollutant concentrations to within statutory limits before discharge to the atmosphere. A comparative analysis of the various emissions abatement technologies was undertaken by Paragon Systems Design based on the criteria of efficiency energy consumption, maintenance, secondary equipment required and cost.

Based on the analysis, the Emission Abatement Systems will comprise the following components:

- Emissions Abatement System: Bag Filter or Wet Impingement Scrubber- this alternative is preferred as it is best suited for the operational needs and is cost effective compared to alternative air emissions abatement systems;
- Dryer Technology: A Rotary Dryer- it is best suited for the operational needs, has a lower initial cost implication, the installation and operational requirements is does not require special skills;

The preferred alternative entails the development of a sand drying plant and associated infrastructure on Erf No. 306 and 307, Atlantis, which includes the following components:

- A combustion-heated dryer for the drying of sand to the client's specifications. The dryer will have a throughput design capacity of at least 100 tons/month of sand. The dryer includes an appropriate enclosure and emissions abatement system.
- A three-sided bunker with sides made of shade netting will be established for the storage of raw material (moist sand).
- Silos for dried sand storage prior to loading and distribution. The dryer will feed dried sand via an enclosed conveyor, directly to the storage silos. The sand will be offloaded via chutes directly to trucks.
- Fuel storage tanks (less than 20m³) will be installed directly adjacent to the dryer for ease of refuelling the dryer.
- Clearing and surfacing of Erf No. 307, and establishing infrastructure related to the drying plant and Atlantis Sand Sales' workshop and office activities, on the site. Site surfacing will include paved roads, unpaved roads and some remaining sandy surfaces where vehicles and equipment will not regularly traverse; and
- The air emissions scrubber system to be located adjacent to the dryer enclosure with a stack of about 5.5m in height.

"No-Go" Alternative (Rejected)

The "no-go" alternative implies that the "status quo" would remain. This alternative is not preferred as it would curtail the financial stability of the business and industry demand for sand supply would not be addressed. The site will utilise existing service infrastructure and is appropriately zoned, as Risk Industry, which is aligned with the current land use of the surrounding properties.

3. Impact Assessment and Mitigation measures

3.1 Need and Desirability and Planning Context

The proposed development is located on Erf No. 306 and 307, Atlantis . Both properties are zoned Risk Industry and the proposed development is in line with current activities and land use practices of the surrounding properties. The forward planning vision for the wider region is generally in support of industrial land use and the proposed development is therefore consistent with this forward planning context. The benefits of the proposed development include, providing job opportunities, stimulating the local economy and the demand for sand supply within the construction commodities.

3.2 Botanical Impacts

The most significant impact of the proposed development is the loss of intact indigenous vegetation on Erf No. 307, Atlantis. Historically, the properties comprised of Atlantis Sand Fynbos and Cape Flats Dune Strandveld, ecosystems categorised as critically endangered and endangered, respectively. Based on the findings of the Biodiversity Assessment dated 11 August 2020 (revised on 14 April 2021), as compiled by Nick Helme Botanical Surveys, one Species of Conservation Concern ("SoCC") was recorded on site. No other SoCC are likely to occur in this small area. Lampranthus explanatus is a creeping vygie, Redlisted as Near Threatened. The botanist has recommended that a Search and Rescue operation is undertaken for the translocation of bulbs and succulents including *Brunsvigia orientalis* (4 or 5 large bulbs), *Lachenalia bulbifera* (3 or 5 bulbs) and one plant of the vygie *Lampranthus explanatus*. The aforementioned Search and Rescue operation must be undertaken during the appropriate season.

In addition to this, to mitigate the loss of 0.20ha of indigenous vegetation as a result of the proposed development, the City of Cape Town's Biodiversity Branch and CapeNature supported the botanist's recommendation that an off-site biodiversity offset be secured (at a 1:1 ratio) in accordance with the Land Bank of the Atlantis Industrial Incentive Scheme. The recommendations and mitigation measures have been included within the relevant sections of the EMPr and conditions of this Environmental Authorisation.

3.3 Freshwater impacts

The proposed development falls within 300m of depression wetlands located north of Erf 307 and within a regulated area of a watercourse, as defined in the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). Based on the findings of the Freshwater Assessment dated April 2021, as compiled by Confluent Aquatic Consulting & Research, it is noted that the impacts associated with the construction and operational phases of the proposed development, are considered to be negligible based on the proximity of the proposed development to the wetlands and the flat topography of the site. The Department of Water and Sanitation in correspondence dated 17 August 2021 confirmed that a Water Use Licence is not required for the proposed development.

3.4 Air Quality and Dust impacts

According to the Atmospheric Impact Report dated September 2021, as compiled by Soundscape Consulting (Pty) Ltd, the impacts associated with the proposed development through all phases of development can be reduced to low with the implementation of the mitigation measures and recommendations made by the specialist. The air quality specialists recommendations have been included within the EMPr. The City of Cape Town: City Health Specialised Services, Air Quality Management Branch correspondence dated 7 September 2021, raised concerns with some of the mitigation measures recommended in the Atmospheric impact Report. These concerns were addressed by the air quality specialists in a follow up correspondence dated 18 January 2022.

A Dust Management Plan has been included, as an addendum to the EMPr in order to manage potential dust impacts.

3.5 Soil and Groundwater Impacts

Contamination of soil and groundwater could occur due to leaks and spills and failure of storage and handling of hydrocarbons needed for adequate operation of the mineral sand drying plant. With the presence of the underlying Atlantis aquifer, the risk of downstream impacts on human health could be significant because drinking water for the area is abstracted from the aquifer. However, limited fuel products are stored on Erf 306 (a 23m³ storage tank for diesel; a 9m³ storage tank for paraffin; and a 1600 litre tank for waste oil), which are associated with Atlantis Sands' administrative workshop. The Atlantis Sands fuel tanks are contained together in a SANS-standard bund. Potential contamination risks are therefore considered to be very low provided the bund is properly maintained. Refuelling the dryer on Erf 307, as well as refuelling vehicles adjacent to the fuel bund on Erf 306, also pose a risk of contamination, which will be minimised with the implementation of best-practice design, which complies with the relevant SANS codes. Mitigation measures have been included in the EMPr to minimise any potential soil and groundwater contamination.

3.6 Socio-economic impacts

It was projected that the proposed development will provide result in benefits ranging from employment creation as well as training and skills development.

The development will result in negative and positive impacts

Negative impacts:

- The development will result in the loss of indigenous vegetation; and
- Air quality impacts.

Positive impacts:

- Contribution to the local economy;
- Increased sand supply to meet demand of the construction industry; and
- The development will provide additional employment opportunities.

4. National Environmental Management Act Principles

The National Environmental Management 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.

5. Conclusion

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.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: "Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."

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