



## **environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko Road, Arcadia,· PRETORIA  
Tel (+ 27 12) 399 9372

**DEA Reference:** 14/12/16/3/3/2/981

**Enquiries:** Ms Mmamohale Kabasa

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Mr Andre Alfred Human  
City of Cape Town Metropolitan Municipality  
Private Bag X9181  
**CAPE TOWN**  
8001

Telephone Number: (021) 400 2366  
Email Address: andre.human@capetown.gov.za

### **PER E-MAIL / MAIL**

Dear Mr Human

### **APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 982/983 FOR THE 1500MW ATLANTIS GAS-TO-POWER FACILITY ON PORTION OF REMAINDER ERF 277 ATLANTIS INDUSTRIAL, CITY OF CAPE TOWN METROPOLITAN MUNICIPALITY IN THE WESTERN CAPE PROVINCE**

With reference to the above application, please be advised that the Department has decided to grant authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.

In terms of regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of Government Notice No. R.993, which prescribes the appeal procedure to be followed. An appellant must submit an appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant.

By post: Private Bag X447,  
Pretoria, 0001; or

By hand: Environment House  
473 Steve Biko,  
Arcadia,  
Pretoria, 0083

If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

*M.S.*

**Appeals must be submitted in writing to:**

Mr Z Hassam, Director: Appeals and Legal Review, of this Department at the above mentioned addresses. Mr Hassam can also be contacted at:

Tel: (012) 399 9356

Email: Appealsdirector@environment.gov.za

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, an appeal under section 43 of that Act will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

For guidance on appeals submitted to the Minister in terms of NEMA and the SEMAs, please find a copy of the guideline on the administration of appeals on the Department's website: ([https://www.environment.gov.za/documents/forms#legal\\_authorisations](https://www.environment.gov.za/documents/forms#legal_authorisations)).

Kindly include a copy of this document with the letter of notification to interested and affected parties.

Yours faithfully



**Mr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**

Date: 23/10/2009

cc:	K Stroebe	Council for Scientific and Industrial Research	Email: kstroebe@csir.co.za
	F Abrahams	Western Cape DEA&DP	Email: fernel.abrahams@westerncape.gov.za





## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014

The 1500MW Atlantis Gas-to-Power Facility on Portion of Remainder Erf 277 Atlantis Industrial,  
City of Cape Town Metropolitan Municipality in the Western Cape Province

City of Cape Town Metropolitan Municipality

<b>Authorisation register number:</b>	<i>14/12/16/3/3/2/981</i>
<b>Last amended:</b>	<i>First issue</i>
<b>Holder of authorisation:</b>	<i>City of Cape Town Metropolitan Municipality</i>
<b>Location of activity:</b>	<i>Portion of Remainder Erf 277 Atlantis Industrial; City of Cape Town Metropolitan Municipality; Western Cape Province</i>

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

## Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA regulations.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

## Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

### **CITY OF CAPE TOWN METROPOLITAN MUNICIPALITY**

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mr Andre Alfred Human

Private Bag X9181

**CAPE TOWN**

8001

Telephone Number: (021) 400 2366

Fax Number: (021) 419 5303

Cell phone Number: (084) 208 3524

Email Address: andre.human@capetown.gov.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, Listing Notice 2 and Listing Notice 3 as amended (GN R. 983, 984 and 985 as amended):

Activity number	Activity description
<p><u>GN R. 983: Activity 11:</u>  <i>"The development of facilities or infrastructure for the transmission and distribution of electricity – (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more..."</i></p>	<p>The site is zoned "General Industrial" and falls within the Atlantis Industrial Complex. Powerlines will be incorporated into the project to evacuate power from site via a loop in and loop out option into the Ankerlig busbar.</p>
<p><u>GN R. 983: Activity 47:</u>  <i>"The expansion of facilities or infrastructure for the transmission and distribution of electricity where the expanded capacity will exceed 275 kilovolts and the development footprint will increase."</i></p>	<p>The project will potentially result in the need for the transmission lines from Ankerlig Power Station to the existing Omega Substation to be expanded to include a greater capacity for this proposed facility.</p>
<p><u>GN R. 984: Activity 2:</u>  <i>"The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where the electricity output is 20 megawatts or more."</i></p>	<p>The facility will have an output of maximum of 1500MW via the use of liquefied natural gas.</p>
<p><u>GN R. 984: Activity 4:</u>  <i>"The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres."</i></p>	<p>The gas to power facility will possibly include the storage of diesel and other dangerous goods in a capacity of 10 000 cubic metres on site.</p>
<p><u>GN R. 984: Activity 5:</u>  <i>"The development and related operation of facilities or infrastructure for the processing of a petroleum resource, including the beneficiation or refining of gas, oil or petroleum products with an installed capacity of 50 cubic metres or more per day, excluding..."</i></p>	<p>The project will entail the construction of a facility and all associated components for the refining and processing of gas in LNG form. This gas resource intake will exceed 50 cubic meters per day for the expected maximum output of 1500MW.</p>

<p><u>GN R. 984: Activity 6:</u></p> <p><i>“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...”</i></p>	<p>An Air Emission License is required to be obtained for the project in terms of the NEM: Air Quality Act.</p>
<p><u>GN R. 984: Activity 9:</u></p> <p><i>“The development of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex excluding...”</i></p>	<p>The facility will require transmission of electricity to the nearby substation.</p>
<p><u>GN R. 984: Activity 15:</u></p> <p><i>“The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for...”</i></p>	<p>The project may entail the excavation, removal and moving of more than 20ha of indigenous vegetation on Portion of Remainder Erf 277 Atlantis Industrial.</p>
<p><u>GN R. 985: Activity 12:</u></p> <p><i>“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.</i></p> <p><i>i. Western Cape-</i></p> <p><i>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.”</i></p>	<p>The project will entail the removal of 38.65ha of indigenous vegetation which consists of a critically endangered ecosystem.</p>

as described in the Environmental Impact Assessment Report (EIAR) dated July 2017 at:

**21 SG Codes:**

C	0	1	6	0	0	8	7	0	0	0	0	0	2	7	7	0	0	0	0	0
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**Site (preferred)**

Alternative (preferred site)	Latitude	Longitude
A	33° 35' 39.121" S	18° 27' 51.470" E
B	33° 36' 22.202" S	18° 28' 21.442" E
C	33° 36' 11.947" S	18° 28' 33.653" E
D	33° 35' 37.646" S	18° 28' 00.553" E
E	33° 35' 37.095" S	18° 27' 58.088" E
F	33° 35' 37.087" S	18° 27' 56.347" E
G	33° 35' 37.799" S	18° 27' 53.823" E
Substation (Omega Substation – Farm Groot Oliphantskop 81)	33° 42' 26.000" S	18° 30' 57.200" E
Construction camp/laydown area	33° 35' 47.790" S	18° 28' 02.690" E
Loop-in loop-out powerlines (Alternative connection 1)	33° 35' 38.230" S	18° 27' 53.890" E
Access to site	33° 36' 17.930" S	18° 28' 26.540" E

- for the 1500MW Atlantis Gas-to-Power Facility on Portion of Remainder Erf 277 Atlantis Industrial, north of Cape Town within the City of Cape Town Municipality, Western Cape hereafter referred to as "the property".

The 1500MW Atlantis Gas-to-Power Facility will comprise the following:

- A Gas Turbine or Gas Engine hall;
  - Up to 4 Combustion turbine and generator sets producing approximately 400MW each (max 1500MW) or multiple combustion engine and generator sets producing approximately 20MW each (max 800MW).
  - Gas turbines for the single shaft combined cycle power plants approximately 390 tonnes in weight, 13m long, 5m in width and 5m high.
  - Single shaft combined cycle power plants require one chimney per unit. These structures are 30m to 40m high and 5m in diameter.

- Heat recovery steam generators;
- Dry cooling radiator systems:
  - One-air coolers for each unit of the combined cycle power plant.
  - These structures are galvanised in weathered silver grey in appearance.
  - The structures are approximately 70mx80mx6m high;
- Building Infrastructure:
  - Offices;
  - Operational and maintenance control centre;
  - Warehouse/workshop (including lighting);
  - Ablution facilities (including water access point for municipal water supply and sewerage connection);
  - Guard House.
- Associated Infrastructure:
  - Associated electrical infrastructure at the Eskom Substation/connection points (including but not limited to transmissions lines to the substation);
  - Gas pipelines for the reticulation of natural gas on site (not transmission to site);
  - Access roads (already existing);
  - Internal roads;
  - Fencing;
  - Maintenance area;
  - Stormwater channels; and
  - Temporary laydown area during the construction phase (approximately 500m<sup>2</sup> to 10 000m<sup>2</sup>).

Technical details of the proposed facility:

Component	Description/ Dimensions
Location of the site	Atlantis Industrial Area approx. 40 km north of Cape Town in the City of Cape Town Metropolitan Municipality
Farm and SG Codes	Portion of Remainder Erf 277 Atlantis Industrial C01600870000027700000
Site access	Niel Hare Road on the southern boundary of the site.
Export capacity	Max 1500MW
Proposed technology	OCGT/CCGT (LNG to power technology)
Height of stacks	30-40m high
Area of gas facility	38.65ha (site), facility requires 32ha

*M.S*



Area occupied by substations	250m <sup>2</sup> - 2ha (depending on generating capacity)
Area occupied by both permanent and construction laydown areas	500m <sup>2</sup> - 10 000m <sup>2</sup>
Length of internal roads	Approximately 500m <sup>2</sup>
Width of internal roads	6-8m
Grid connection	Connection at 400kV with a loop-in and out via the Ankerlig busbar.
Size and number of storage vessels for gas and other fuels	10 000m <sup>3</sup> x 1 storage vessel for the potential storage of diesel (necessity of this vessel to be determined). Hydrogen stored in three 10m <sup>3</sup> vessels at a maximum pressure of 25 bar. Chlorine used for potable water treatment to be stored in a maximum of three 925kg drums on site. Anhydrous ammonia used for water treatment is to be stored in single 20m <sup>3</sup> storage vessel.
Height of fencing	4-5m
Type of fencing	Wrought iron palisade

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The Atlantis Gas-to-Power Facility and its associated infrastructure with a maximum output capacity of 1500MW as described above is hereby approved.
2. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department 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 of the authorisation to apply for further environmental authorisation in terms of the regulations.

6. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
8. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

#### **Notification of authorisation and right to appeal**

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
  - 10.1. specify the date on which the authorisation was issued;
  - 10.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
  - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 10.4. give the reasons of the competent authority for the decision.
11. The holder of the authorisation must publish a notice –
  - 11.1. informing interested and affected parties of the decision;
  - 11.2. informing interested and affected parties where the decision can be accessed; and
  - 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.

#### **Commencement of the activity**

12. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any

provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

### **Management of the activity**

13. The layout map titled: Provisional Layout Map for the Atlantis Gas to Power Facility on Portion 1 and Portion 4 of Cape Farm 1183 and included on as Appendix A of the EMPr is approved.
14. A shapefile of the approved development layout/footprint must be submitted to this Department within two months from the date of this decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title. The shape file must be submitted to:

#### **Postal Address:**

Department of Environmental Affairs  
Private Bag X447  
Pretoria  
0001

#### **Physical address:**

Department of Environmental Affairs  
Environment House  
473 Steve Biko  
Arcadia  
Pretoria

For Attention: Mr Muhammad Essop  
Integrated Environmental Authorisations  
Strategic Infrastructure Developments  
Telephone Number: (012) 399 9406  
Email Address: MEssop@environment.gov.za

15. The Environmental Management Programme (EMPr) compiled by the Council of Scientific and Industrial Research that was integrated as Part B of the EIAr, is approved.
16. The EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
17. Changes to the approved EMPr must be submitted in accordance to the EIA Regulations applicable at the time.
18. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.

### **Frequency and process of updating the EMPr**

19. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 26 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
20. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
21. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
22. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R. 982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
23. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

## Monitoring

24. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
  - 24.1. The ECO must be appointed before commencement of any authorised activities.
  - 24.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
  - 24.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
  - 24.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

## Recording and reporting to the Department

25. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
26. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
27. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
28. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
29. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
30. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

### **Notification to authorities**

31. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

### **Operation of the activity**

32. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

### **Site closure and decommissioning**

33. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

### **Specific conditions**

#### Avifauna

34. Prior to construction, an avifaunal specialist must conduct a site walkthrough, covering the final road and powerline routes as well as the site, to identify any nests/breeding/roosting activity of priority species, as well as any additional sensitive habitats. The results thereto must inform the final construction schedule in close proximity to that specific area, including reducing construction time, scheduling activities around avian breeding and/or movement schedules, and lowering levels of associated noise.
35. Should any of the Red Data species be confirmed to be breeding (e.g. if a nest site is found), construction activities within 500m of the breeding site must cease immediately and an avifaunal specialist must be contacted for further assessment and instruction on how to proceed.
36. The results of the pre-construction bird monitoring assessments must inform the construction schedule of the facility.
37. The facility must be designed in a manner that prevents infrastructure components from being used as perching or roosting substrates by birds and bats.

38. The holder of this environmental authorisation must restrict the construction activities to the footprint area. No access to the remainder of the property is allowed.
39. Anti-collision devices such as bird flappers must be installed where powerlines cross avifaunal corridors (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of anti-collision devices. These devices must be according to Eskom's Transmission and Birdlife Guidelines.

#### Vegetation, wetlands and water resources

40. The 'no-go' areas of the development property must be clearly demarcated and must be excluded from the final layout plan.
41. All watercourses are regarded as sensitive. All developments within 500m of watercourses must comply with the National Water Act.
42. Relevant permits must be obtained from relevant authorities for any removal or destruction of Threatened or Protected Species (TOPs).
43. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be kept by the ECO.
44. Construction activities must be restricted to demarcated areas to restrict the impact on sensitive environmental features.
45. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs. Reclamation activities shall be undertaken according to the rehabilitation plan to be included in the approved EMPr.
46. No exotic plants must be used for rehabilitation purposes; only indigenous plants of the area must be utilised.
47. Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
48. Contractors and construction workers must be clearly informed of the no-go areas.
49. The final development area should be surveyed for species suitable for search and rescue, which should be trans-located prior to the commencement of construction.
50. Disturbed areas must be rehabilitated as soon as possible after construction with locally indigenous plants to enhance the conservation of existing natural vegetation on site.
51. No discharge of effluents or polluted water must be allowed into any rivers or wetland areas.

52. If construction areas are to be pumped of water (e.g. after rains), this water must be pumped into an appropriate settlement area, and not allowed to flow into any rivers or wetland areas.

#### Roads and transportation

53. The local access road onto Niel Hare Road on the southern boundary of the site is approved for access during construction and for the future operational and ultimate decommissioning phase of the facility.
54. Existing road infrastructure must be used as far as possible for providing access to the site. Where no road infrastructure exists, new roads must be placed within existing disturbed areas or environmental conditions must be taken into account to ensure that minimum amount of damage is caused to natural habitats.
55. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuters, consideration must be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.
56. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
57. Signage must be erected at appropriate points warning of turning traffic and the construction site.
58. Road borders must be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.
59. Roads must be designed such that changes to surface water runoff are avoided and erosion is not initiated.

#### Noise and blasting Activities

60. Routine noise measurements must be conducted during the operation of the facility and a complaints register must be opened and made available to affected parties and to the Department on request.
61. The holder of this authorisation must ensure that all equipment and machinery are well maintained and equipped with silencers.
62. Construction staff must be trained in actions to minimise noise impacts.
63. The holder of this authorisation must ensure that the National Noise Control Regulations and SANS10103:2008 are adhered to and measures to limit noise from the work site are implemented.
64. The holder of this authorisation must ensure that all air intake and exhaust ducts are installed with acoustic attenuation devices.



### Excavation and Stockpiling Activities

65. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
66. Borrow materials must be obtained only from authorised and permitted sites. Permits must be kept on site by the ECO.
67. Anti-erosion measures such as silt fences must be installed in disturbed areas.

### Visual resources

68. The holder of this authorisation must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
69. A lighting engineer must be consulted to assist in the planning and placement of light fixtures in order to reduce visual impacts associated with glare and light trespass.

### Hazardous materials and waste management

70. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
71. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
72. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved waste landfill site licensed to accept such waste.
73. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas.
74. Hazardous substances must not be stored where there could be accidental leakage into surface or subterranean water.
75. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions. Furthermore, no chemicals must be stored nor may any vehicle maintenance occur within 350m of the temporal zone of wetlands, a drainage line with or without an extensive floodplain or hillside wetlands.
76. Temporary bunds must be constructed around chemical storage to contain possible spills.
77. Spill kits must be made available on-site for the clean-up of spills.

78. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling and re-use options where appropriate. Where solid waste is disposed of, such disposal shall only occur at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
79. The holder of this authorisation must provide sanitation facilities within the construction camps and along the road so that workers do not pollute the surrounding environment. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste disposal site.
80. The holder of this authorisation must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the Environmental Impact Assessment Regulations, 2014 as amended.
81. The holder of this authorisation must provide sanitation facilities for the operation staff.

#### Air quality and Climate Change

82. Dust abatement techniques must be used before and during surface clearing, excavation, or blasting activities.
83. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures may include wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.
84. A continuous climate change assessment must be done throughout the life cycle of the project, taking into account the national Green House Gases limits. An audit report must be submitted annually to the Department.

#### Historical / cultural / paleontological resources

85. If concentrations of archaeological, heritage material, fossils and human remains are uncovered during construction, all work must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) so that a systematic and professional investigation / excavation can be undertaken.
86. Construction managers/foremen must be informed before construction starts of the possible types of resources that may be encountered and the procedures to follow when they find sites.

Human health and safety

87. A health and safety programme must be developed to protect both workers and the general public during construction, operation and decommissioning of the energy facility.
88. The holder of this authorisation must train safety representatives, managers and workers in workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
89. No unsupervised open fires for cooking or heating must be allowed on site.

**General**

90. The recommendations of the EAP in the EIAR dated July 2017 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.
91. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMP, must be made available for inspection and copying-
  - 91.1. at the site of the authorised activity;
  - 91.2. to anyone on request; and
  - 91.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
92. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 23/10/2017



Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

## Annexure 1: Reasons for Decision

### 1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The listed activities as applied for in the application form received on 19 October 2016 and amended on 10 July 2017.
- b) The information contained in the draft Scoping Report dated October 2016 and received on 19 October 2016.
- c) The information contained in the final Scoping Report dated January 2017 and received on 06 January 2017.
- d) The information contained in the draft EIAr dated March 2017 and received on 20 March 2017.
- e) The information contained in the amended draft EIAr dated May 2017 and received on 29 May 2017.
- f) The information contained in the final EIAr dated July 2017 and received on 10 July 2017.
- g) The comments received from the following competent authorities: Cape Nature; the Western Cape Department of Environmental Affairs and Development Planning; City of Cape Town: Environmental Resource Management Department, Air Quality Unit, Solid Waste Planning Unit, Water and Sanitation Unit, Spatial Planning and Urban Design, Environmental Resources Unit, Pollution and Chemicals Management; Eskom; the Department of Agriculture, Forestry and Fisheries; DEA: Biodiversity Conservation Unit; the Western Cape Department of Cultural Affairs and Sport: Heritage Resource Management; and SAHRA: Archaeology, Palaeontology & Meteorites Unit.
- h) The information contained in the specialist studies contained within the appendices of the final EIAr dated July 2017 and as appears below:

Title	Prepared By
Risk Assessment	Riscom (Pty) Ltd. (M Oberholzer)
Air Quality and Climate Change Specialist Study	uMoyo-Nilu Consulting (Pty) Ltd (M Zunckel)
Archaeological Impact Assessment	ACO Associates ( Dr L Webley)
Palaeontology Impact Assessment	Dr G Avery
Noise Impact Assessment	SafeTech (Dr B Williams)

Terrestrial Ecology Impact Assessments	JE Almond of Natura Viva cc Bergwind Botanical Surveys and Tours ( Dr D McDonalds)
Traffic Impact Assessment	WSP Group Africa (Pty) Ltd. (C Bredenhann)

## 2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the proposed project stems from the provision of electricity to the national grid.
- c) The EIAr dated July 2017 identified all legislation and guidelines that have been considered in the preparation of the EIAr.
- d) The methodology used in assessing the potential impacts identified in the EIAr dated July 2017 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 (as amended) for public involvement.

## 3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the EIAr dated July 2017 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The information contained in the EIAr dated July 2017 is deemed to be accurate and credible.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIAr and will be implemented to manage the identified environmental impacts during the development phases.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.