



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road, Arcadia · PRETORIA

DEA Reference: 14/12/16/3/3/1/1626

Enquiries: Nyiko Nkosi

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Mr Steven Arumugam  
Department of Water and Sanitation  
Private bag X313  
PRETORIA  
0001

E-mail: [arumugams@dws.gov.za](mailto:arumugams@dws.gov.za)

### PER MAIL / E-MAIL

Dear Mr Arumugam

#### APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 982/983/985: CONSTRUCTION OF THE OLIFANTS RIVER WATER RESOURCES DEVELOPMENT PROJECT PHASE 2 (ORWRDP-2) SUB-PHASE 2E AND 2F, SEKHUKHUNE AND CAPRICORN DISTRICT MUNICIPALITIES, LIMPOPO 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 fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, and the provisions regarding the submission of appeals as contained in the Regulations.

Should any person wish to lodge an appeal against this decision, he/she must submit the 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; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

Mr Z Hassam, Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: [appealsdirector@environment.gov.za](mailto:appealsdirector@environment.gov.za)

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

By post: Private Bag X447,  
Pretoria,  
0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, 1998, the lodging of an appeal 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.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at [https://www.environment.gov.za/documents/forms#legal\\_authorisations](https://www.environment.gov.za/documents/forms#legal_authorisations) or request a copy of the documents at [appealsdirector@environment.gov.za](mailto:appealsdirector@environment.gov.za).

Yours faithfully

  
**Mr Sabelo Malaza**  
**Chief Director: Integrated Environmental Authorisations**  
**Department of Environmental Affairs**  
Date: 02/05/2017

|     |                     |                                                                     |                   |                                                                         |
|-----|---------------------|---------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------|
| CC: | Mr Deon Esterhuizen | Aurecon Ndodana Joint Venture                                       | Tel: 012-643-9040 | Email: <a href="mailto:deon@iliso.com">deon@iliso.com</a>               |
|     | Mothapo S           | Limpopo Department of Economic Development, Environment and Tourism | Tel: 015-290-7164 | Email: <a href="mailto:mothapos@ledet.gov.za">mothapos@ledet.gov.za</a> |



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## Environmental Authorisation

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

The Construction of the Olifants River Water Resources Development Project Phase 2  
(ORWRDP-2) Sub-Phase 2E and 2F within Sekhukhune and Capricorn District Municipalities,  
Limpopo Province

Sekhukhune and Capricorn District Municipalities

|                                |                                                                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Authorisation register number: | 14/12/16/3/3/1/1626                                                                                                                                                                                        |
| Last amended:                  | First issue                                                                                                                                                                                                |
| Holder of authorisation:       | DEPARTMENT OF WATER<br>AFFAIRS                                                                                                                                                                             |
| Location of activity:          | LIMPOPO PROVINCE: Within<br>Ward 3,10,11 AND 17 of<br>Greater Tubatse Local<br>Municipality, Ward 9,10 and 11<br>of Fetakgomo Local<br>Municipality and Ward 25 of<br>Lepelle Nkumpi Local<br>Municipality |

This environmental 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 –

### **DEPARTMENT OF WATER AFFAIRS**

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

with the following contact details –

Mr Steven Arumugam  
Department of Water Affairs  
Private Bag X313

**PRETORIA**

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Tel: (012) 336 7027

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Cell: 060 550 3998

E-mail: [arumugams@dws.gov.za](mailto:arumugams@dws.gov.za)

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 (GN R. 983 and R985):

| Listed activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Activity/Project description                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><u>GN R. 983 Item 09:</u></p> <p><i>The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water-</i></p> <p><i>(i) with an internal diameter of 0,36 metres or more; or</i></p> <p><i>(ii) with a peak throughput of 120 litres per second or more;</i></p> <p><i>excluding where-</i></p> <p><i>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve;</i></p> <p><i>or</i></p> <p><i>(b) where such development will occur within an urban area.</i></p> | <p>The daily water transfer through the Sub-phase 2E pipeline (1.2 m diameter and 13.5km long) will be 1.318m³/s (equivalent to 1 318 litres per second).</p> <p>The daily water transfer through the balancing dam and the Sub-phase 2F pipeline (1.2m diameter for 18.5km, where it then reduces to a 1.0 m diameter pipeline 25.6km in length) will be 1.563m³/s (equivalent to 1 563 litres per second).</p> <p>This is all raw water under gravity flow.</p> |
| <p><u>GN R. 983 Item 19:</u></p> <p><i>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from-</i></p> <p><i>(i) a watercourse;</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving-</i></p>                                                                                                                                                                                   | <p>The pipeline will cross rivers, drainage lines and dongas thus in the works the areas will be excavated then the pipe will be laid and backfilled.</p> <p>Based on the size of the watercourse crossings; the average volumes of</p>                                                                                                                                                                                                                           |

| Listed activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Activity/Project description                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(a) will occur behind a development setback;</p> <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan; or</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p>material to be moved from the watercourses, dongas and drainage lines are as follows:</p> <p>(i) Sub-Phase 2E: 542 m<sup>3</sup> and (ii) Sub-Phase 2F: 754 m<sup>3</sup>.</p>                                                                                                                                                                                                                    |
| <p><u>GN R. 985 Item 2:</u></p> <p>The development of reservoirs for bulk water supply with a capacity of more than 250 cubic metres.</p> <p>(a) In Limpopo</p> <p>iii. Outside urban areas, in:</p> <p>(bb) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(dd) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(ff) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve.</p> | <p>The proposed reservoir will have a capacity of 20,000 m<sup>3</sup>.</p> <p>The estimated size of the area to be cleared for the reservoir is 54,000m<sup>2</sup>.</p> <p>In accordance with the Limpopo Conservation Plan version 2: The reservoirs on the pipeline route will be placed in Critical Biodiversity Areas 1 and 2</p> <p>Within 5km of Potlake Nature Reserve as per NBA 2011.</p> |
| <p><u>GN R. 985 Item 12:</u></p> <p>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.</p> <p>(a) In Limpopo</p> <p>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.</p>                                                                                                                                                       | <p>Area to be cleared of indigenous vegetation is approximately 100 ha (these estimations are based on the size of the servitude area).</p> <p>In accordance with the Limpopo Conservation Plan version 2: The pipeline route traverses through Critical Biodiversity Areas 1 and 2 and will require the clearance of vegetation to install the pipeline and</p>                                     |

| Listed activities                                                       | Activity/Project description                                                            |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| ii) Within critical biodiversity areas identified in bioregional plans. | associated infrastructure.<br><br>Within 5km of Potlake Nature Reserve as per NBA 2011. |

as described in the Basic Assessment Report (BAR) dated January 2017 at:

| Route Description | Farm Name                     | Portion Number | SG 21 Digit Code      |
|-------------------|-------------------------------|----------------|-----------------------|
| 2E                | Groothoek 256 KT              | RE             | T0KT0000000002560000  |
| 2E                | Twyfelaar 119 KT              | RE             | T0KT0000000001190000  |
| 2E                | Clapham 118 KT                | RE             | T0KT0000000001180000  |
| 2E                | Forest Hill 117 KT            | RE             | T0KT0000000001170000  |
| 2F                | Surbiton 115 KT               | RE             | T0KT0000000001150000  |
| 2F                | Twickenham 114 KT             | RE             | T0KT0000000001140000  |
| 2F                | Paschas Kraal 466 KS          | 1              | T0KS00000000046600001 |
| 2F                | Klipfontein 465 KS            | RE             | T0KS0000000004650000  |
| 2F                | Brakfontein 464 KS            | RE             | T0KS0000000004640000  |
| 2F                | Umkoanes Stad 419 KS          | RE             | T0KS0000000004190000  |
| 2F                | Middelpunt 420 KS             | RE             | T0KS0000000004200000  |
| 2F                | Diamand 422 KS                | RE             | T0KS0000000004220000  |
| 2F                | Schoonoord 462 KS             | RE             | T0KS0000000004620000  |
| 2F                | Blauwbloemet jieskloof 428 KS | RE             | T0KS0000000004280000  |
| 2F                | Dal Josaphat 461 KS           | RE             | T0KS0000000004610000  |
| 2F                | Koppieskraal 475 KS           | RE             | T0KS0000000004750000  |
| 2F                | Locatie van M'Phatlele 457 KS | RE             | T0KS0000000004570000  |

| Pipeline Corridor                           | Latitude        | Longitude       |
|---------------------------------------------|-----------------|-----------------|
| Start of sub-phase 2 E & F                  | 24° 32' 22.91"S | 30° 8' 56.47"E  |
| Middle of the pipeline of sub-phase 2 E & F | 24° 22' 8.23"S  | 29° 58' 48.80"E |
| End of sub-phase 2 E & F                    | 24° 21' 15.31"S | 29° 45' 35.10"E |

the location indicated in the locality plan, attached as Annexure 2 of this authorisation.

- Construction of the Olifants River Water Resources Development Project Phase 2 (ORWRDP-2) Sub-Phase 2E and 2F within Sekhukhune and Capricorn District Municipalities, Limpopo Province, hereafter referred to as "the property".

Sub-Phase 2E comprises of the following:

- A 13,605 m long, steel, gravity pipe with a diameter of 1 200 mm and design velocity of 1.318 m<sup>3</sup>/s from Ga-Mathipa Reservoir (near Mooihoek) to Havercroft Junction, the end of Sub-Phase 2E. Two cross connections will be made from the Sub-Phase 2E pipeline to the existing infrastructure, namely Clapham and Havercroft Interconnection respectively.
- Clapham Interconnection: This cross connection will be from the Sub-Phase 2E pipeline to the existing Lebalelo pipeline via the Ga-Mathipa Terminal Reservoir. It will connect close to the existing Clapham Reservoir and Pump Station on the upstream side of the reservoir and pump station. The cross connection will be at Chainage 8 080 m and will consist of a 2,660 m long and 800 mm diameter steel pipe.
- Havercroft Interconnection: This cross connection is at the end of Sub-Phase 2E. It will enable water to be transferred from Sub-phase 2E to Sub-phase 2H (Lebalelo system). This interconnection will comprise of a 1,824 m long and 800mm diameter steel pipe from Ch 13.605.

The pipeline will have about 10 stream crossings including both the Clapham and Havercroft interconnections. Appropriate erosion control measures will be installed to restore the stream banks to resemble their original contour.

Sub-Phase 2F comprises of the following:

- Steel water pipe constructed between the Havercroft Junction and the existing Olifantspoort Water Treatment Works (WTW) (approximately 50 km East of Lebogakgomo), with the design velocity of 1.563 m<sup>3</sup>/s. The pipe will have the total length of 43 446 m, with different diameters along the alignment as indicated below:

- From Havercroft Junction to Klipfontein Reservoir: This section of the alignment will be 18,140 m long with a diameter of 1200 mm.
- From Klipfontein Reservoir to Olifantspoort WTW: This section of the alignment will be a 25,306 m long pipe of 1000 mm diameter pipe.
- Construction of 20Ml earth fill balancing dam at Klipfontein, with the surface area of 8 500m<sup>2</sup>, and maximum height of 4.6m.
- The pipeline will have about 19 stream crossings including both the Clapham and Havercroft interconnections. Appropriate erosion control measures will be installed to restore the stream banks to resemble their original contour.

Both Sub-Phase 2E&F comprise of the following:

- Construction of donga rehabilitation structures in areas where severe and active erosion occur. These structures consist of a concrete wall/spillway, and in areas where the donga is very large earth embankments will be used as infill.
- Numerous temporary gravel access roads will be constructed to gain access to the site, lay down areas, spoil sites, and borrow pits and contractor's site camps etc. during construction. These roads will be removed at the end of the construction period but some (especially those accesses leading to the pipeline servitudes) will be upgraded to permanent access roads where viable and required.
- Installation of scour valves, air valves and in-line isolating valves along the pipeline route which are essential for operation and maintenance of the pipeline.
- Installation of a 24 - core fibre optic cable (FOC) in separate 110 mm diameter ducts along the pipeline route between Ga-Mathipa and Olifantspoort WTW for data communication and transmission for the monitoring and control of the scheme, as well as for the security information.
- Establishment of the lay down areas for temporary storage of equipment and supplies during construction. These areas will be establishment along the route of the pipeline, specifically where the pipeline crosses major rivers, streams and donga areas.

## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The construction of the Olifants River Water Resources Development Project Phase 2 (ORWRDP-2) Sub-Phase 2E and 2F within Sekhukhune and Capricorn District Municipalities in Limpopo Province, using the preferred Technology alternative (excavating a trench and installing the infrastructure) is approved, as per the geographic coordinates cited in the table reflected on page 6 above.
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.

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

11. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014 and no appeal has been lodged against the decision. 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**

12. The Environmental Management Programme (EMPr) submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and strictly adhered to.

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

13. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 20 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.

14. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
15. 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.
16. 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.
17. The holder of the authorisation may apply to amend the impact management outcomes or objectives of the 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**

18. 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.
  - 18.1. The ECO must be appointed before commencement of any authorised activities.
  - 18.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department at [Directorcompliance@environment.gov.za](mailto:Directorcompliance@environment.gov.za).
  - 18.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
  - 18.4. 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**

19. 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 at [Directorcompliance@environment.gov.za](mailto:Directorcompliance@environment.gov.za).
20. 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 at [Directorcompliance@environment.gov.za](mailto:Directorcompliance@environment.gov.za).
21. 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.
22. The holder of the authorisation must, in addition, submit an environmental audit report 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.
23. 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.
24. 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**

25. 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

26. 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

27. 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

28. No activities, which require a water use authorisation, will be allowed to encroach into a water resource without a water use authorisation being in place from the Department of Water and Sanitation.
29. A detailed Asset and Infrastructure survey must be done, after the formalisation and expropriation of the servitude corridor, and this study must be submitted to this Department for record keeping.
30. A final Layout map, with final positioning of the pipeline as informed by the detailed Asset and Infrastructure Survey, including coordinates taken every 250 meters, must be submitted to the Department for record keeping.
31. A minimum 20 m buffer zone must be implemented around all grave sites and cemeteries identified along the sub-phase 2E & 2F alignment.
32. Should any archaeological or cultural heritage resources, including human remains / graves as defined and protected under the National Heritage Resources Act, 1999, be identified during the construction phase, construction activities within the vicinity of the findings must immediately cease and the findings must be reported to the Heritage Resources Authority. Should human remains be found on site, the South African Police Service must also be notified.
33. An ecologist must be appointed to perform a final walkthrough of the alignment to identify sensitive plant species, assist in identifying the areas that require protection and avoidance of rocky outcrops, and to identify plant species that must be rescued and replanted.
34. All affected plant specimens as identified in the botanical specialist report attached in the BAR dated January 2017, such as *Aloe castanea*, *A. marlothii*, *A. cryptopoda*, *A. globuligemma*, *A.*

*fosteri*, *Kleinia longiflora* and *Euphorbia* species, based on their good soil binding properties, must be "rescued" prior to construction.

- 34.1. These affected plant species must be temporarily placed within an onsite nursery for re-establishment after construction, and must be replanted and used during the rehabilitation process to combat erosion.
  - 34.2. A certified plant reproductive biologist must be employed to supervise the transplantation process and to oversee the nursery.
  - 34.3. A management plan must be compiled for the nursery operations to ensure the persistence of "rescued" plant specimens. Copies of this management plan must be submitted to this Department for record keeping.
35. A permit must be obtained from the relevant nature conservation agency for the removal or destruction of indigenous, protected or endangered plant or animal species and a copy of such permit/s must be submitted to the Department for record keeping.
36. No exotic plants may be used for rehabilitation purposes. Only indigenous plants, found within a 10km radius, of the development footprint may be utilised.
37. The holder of the authorisation is required to inform the Limpopo Department of Economic Development, Environment and Tourism, Department of Agriculture, Forestry and Fisheries (DAFF) and this Department should the removal of protected species, medicinal plants and "data deficient" plant species be required.
38. Vegetation clearing must be kept to an absolute minimum. Mitigation measures as specified in the Specialist Studies / BAR dated January 2017 must be implemented to reduce the risk of erosion and the invasion of alien species.
39. Construction must include design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
40. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste, which will not be recycled, must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).

#### **General**

41. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMP, must be made available for inspection and copying-
-

- 41.1. at the site of the authorised activity;
- 41.2. to anyone on request; and
- 41.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
42. 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: 02/05/2017



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 information contained in the BAR dated January 2017;
- b) The comments received from Tubatse Local Municipality, Lebalelo Water Users Association (LWUA) as well as the Olifants Joint Water Forum (JWF), Anglo American and interested and affected parties as included in the BAR dated January 2017;
- c) Mitigation measures as proposed in the BAR dated January 2017 and the EMPr;
- d) The information contained in the specialist studies contained within Appendix D of the BAR; and
- 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).

### 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.
- a) The need for the proposed project stems from the purpose of the overall Olifants River Water Resources Development Project (ORWRDP), which is to augment water supply in the middle of the Olifants River catchment. Local communities will have access to potable water which is a basic need.
- b) The BAR dated January 2017 identified all legislation and guidelines that have been considered in the preparation of the BAR dated January 2017.
- c) The methodology used in assessing the potential impacts identified in the BAR dated January 2017 and the specialist studies have been adequately indicated.
- d) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.

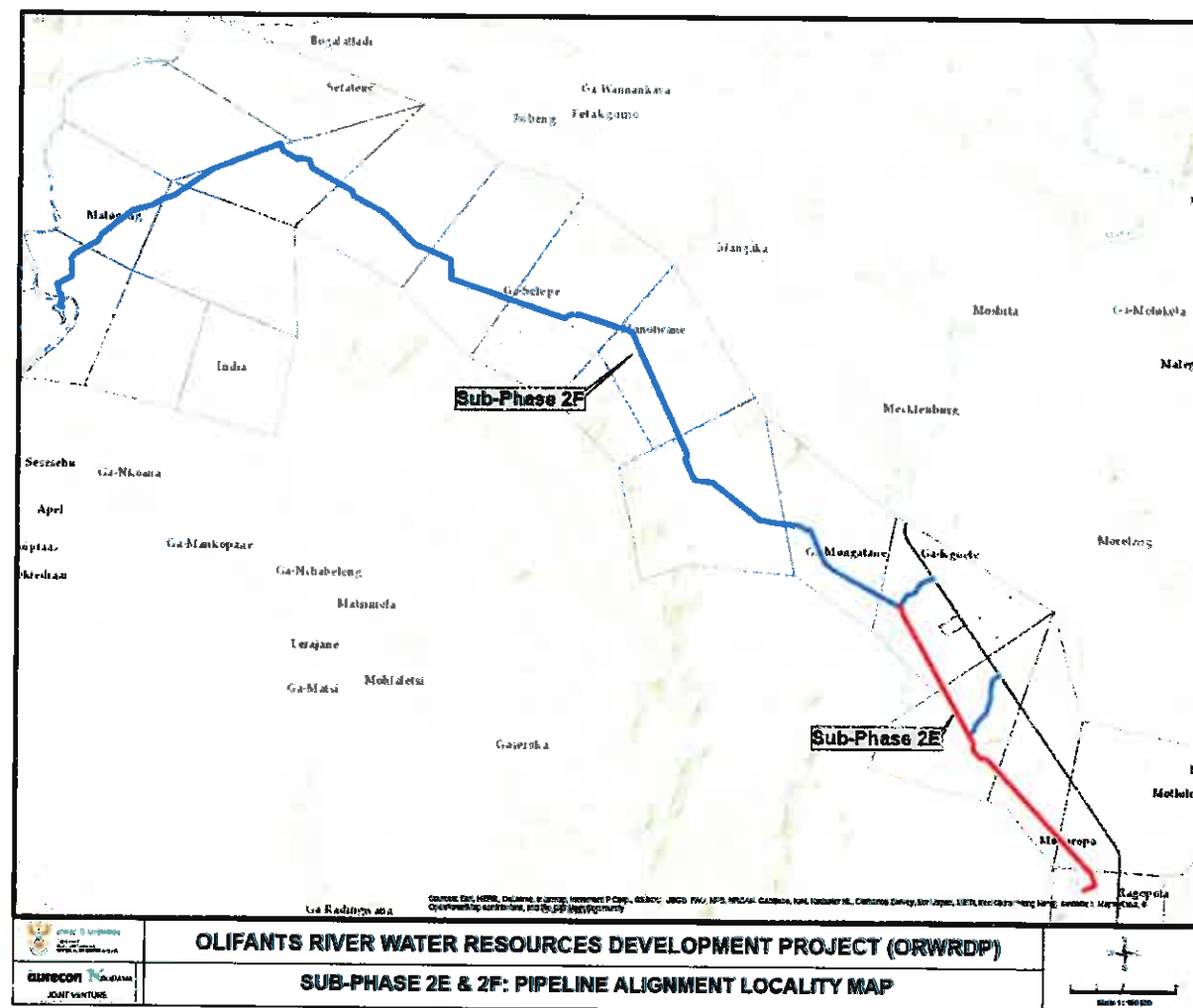
### 3. Findings

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 BAR dated January 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 proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) According to the independent EAP, the information contained in the BAR dated January 2017 is accurate and credible.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

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.

## Annexure 2: Locality Plan



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