



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

**Environmental Authorisation**

**Authorisation register number:** 12/12/20/1467

**Last amended:**

**Holder of authorisation:** DEPARTMENT OF WATER  
AFFAIRS

**Location of activity:** LEPHALALE

*J 24/2/2010*

## 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 activity specified below.

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, 2006 the Department hereby authorises –

DEPARTMENT OF WATER AFFAIRS

with the following contact details –

Mr Ockie van den Berg

Private Bag X 313

**PRETORIA**

0001

Tel no: 012 336 8613

Fax no: 012 336 7399

to undertake the following activity/ activities (hereafter referred to as "the activity")

*GN R. 386*

*1: The construction of facilities or infrastructure, including associated structures or infrastructure, for –*

*(k) the bulk transportation of sewage and water, including storm water, in pipelines with –*

*(i) an internal diameter of 0,36 metres or more; or*

*(ii) a peak throughput of 120 litres per second or more;*

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- (l) *the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts;*
- (m) *any purpose in the one in ten year flood line of a river or stream, or within 32 metres from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including -*
- (i) *canals;*
  - (ii) *channels;*
  - (iii) *bridges;*
  - (iv) *dams; and*
  - (v) *weirs;*
- (n) *the off-stream storage of water, including dams and reservoirs, with a capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of the activity listed in item 6 of Government Notice No. R. 387 of 2006;*
- 4: *The dredging, excavation, infilling, removal or moving of soil, sand or rock exceeding 5 cubic metres from a river, tidal lagoon, tidal river, lake, in-stream dam, floodplain or wetland.*
- 7: *The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1 000 cubic metres at any one location or site.*
- 12: *The transformation or removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of section 52 of the national Environmental management: Biodiversity Act, 2004 (Act 10 of 2004); and*
- 15: *The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.*
- 20: *The transformation of an area zoned for use as public open space or for a conservation purpose to another use.*

for the proposed de-bottlenecking of the existing pipeline supplying Lephalale with water through the construction of the proposed 9 km pipeline adjacent to the existing pipeline as indicated on the site layout plan as included in the basic assessment report (BAR), dated December 2009, Appendices A3 and A4, and as per the project description on page 7 of the BAR, which fall within the jurisdiction of the Lephalale Local Municipality of the Limpopo Province, hereafter referred to as "the property".


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The granting of this environmental authorisation is subject to the conditions set out below.

## Conditions

### Scope of authorisation

- 1.1 Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.
- 1.2 The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 1.3 The activity authorised may only be carried out at the property indicated above and as shown in Appendices A3 and A4: Layout plans, of the BAR and include the following:
  - 1.3.1 The construction of the 9km gravity pipeline with a diameter up to 1100mm from Wolvenfontein balancing dams, with interconnections to the existing pipeline.
  - 1.3.2 In addition the following infrastructure will be established along the route:
    - 1.3.2.1 Air valves;
    - 1.3.2.2 Scour valves;
    - 1.3.2.3 Pipe access points;
    - 1.3.2.4 Road crossings as per Provincial Roads Department standards;
    - 1.3.2.5 River crossings as per existing Department of Water Affairs standards;
    - 1.3.2.6 A cathodic protection system;
    - 1.3.2.7 AC mitigation;
    - 1.3.2.8 Markers to mark the route of the pipeline;
    - 1.3.2.9 Protective measures required to curb surge in a pipeline such as reflux valves and surge tanks; and
    - 1.3.2.10 Farmer's off-take points.
  - 1.3.3 Construction of access roads to gain access to the pipeline construction area and along the servitude.
  - 1.3.4 Removal of vegetation to accommodate the construction servitude.
  - 1.3.5 Rehabilitation of disturbed areas once construction is completed where no permanent structures are erected.

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- 1.4 Any changes to, or deviations from, the activity description set out in 1.3 above, authorised under this 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 authorisation in terms of the regulations.
- 1.5 This activity must commence within a period of five (5) years from the date of issue of this 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.
- 1.6 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.
- 1.6.1 Relevant legislation that must be complied with by the holder of this authorisation include but is not limited to:
- Archaeological remains, artificial features and structures older than 60 years are protected by the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Should any archaeological artefacts be exposed during excavation for the purpose of laying foundations, construction in the vicinity of the finding must be stopped. An archaeologist must be called to the site for inspection. Under no circumstances shall any artefacts be destroyed or removed from the site. The South African Heritage Resource Agency and AMAFA must be contacted to this effect.
  - Provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).
  - Should fill material be required for any purpose, the use of borrow pits must comply with the provisions of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002).
  - Provisions of the National Road Traffic Act, 1996 (Act 93 of 1996) regarding the use of public roads during construction activities and measures for traffic control as prescribed by the South African Traffic Safety Manual.
  - Provisions of the National Water Act, 1998 (Act 36 of 1998).
  - Provisions of the NEM: Air Quality Management Act, Act 39 of 2004.

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- Provisions of the NEM: Waste Management Act, Act 59 of 2008.
- Provisions of the Fencing Act, Act 31 of 1963.
- Provisions of the Hazardous Substances Act, 1973 (Act 15 of 1973).
- Provisions of the Explosives Act, 2003 (Act 15 of 2003).
- Relevant local authority bylaws and regulations.
- Should any activity be planned on site that is a listed activity in terms of the NEMA Regulations, 2006, which is not covered by this authorisation, a separate application for such activity must be lodged with the relevant competent authority.

### **Appeal of authorisation**

- 1.7 The holder of the authorisation must notify every registered interested and affected party, in writing and within 10 (TEN) calendar days, of receiving notice of the Department's decision to authorise the activity.
- 1.8 The notification referred to in 1.7 must –
- 1.8.1 specify the date on which the authorisation was issued;
  - 1.8.2 inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations;
  - 1.8.3 advise the interested and affected party that a copy of the authorisation will be furnished on request, and
  - 1.8.4 give the reasons for the decision.

### **Management of the activity**

- 1.9 The Environmental Management Plan ("EMP") for construction compiled and submitted to the Department for approval with the BAR as Appendix G3 is hereby approved for implementation.
- 1.10 The approved construction EMP will be seen as a dynamic document which may change over time to adapt to the requirements of the construction process. However, any changes to the EMP must be submitted to the Department for approval before such changes could be effected.

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- 1.11 Amendment of the EMP must be approved in writing by the Department before such changes can be implemented.
- 1.12 The holder of this authorisation must ensure the following measures are implemented during the construction phase of the development:
- 1.12.1 All contractor staff must undergo environmental awareness induction training with regard to protection of the natural environment, the conditions of the environmental authorisation and the requirements of the EMP.
  - 1.12.2 All contractor staff must be easily identifiable through the use of company overalls with company logos and all contractor staff must have an identity card to ensure security of the surrounding communities.
  - 1.12.3 Measures for waste avoidance and minimisation at all works areas, material lay down areas and construction camps and disposal of construction waste at an appropriately registered facility.
  - 1.12.4 Measures for dust control during the construction phase.
  - 1.12.5 Measures for noise control during the construction period to limit the nuisance factor of noise.
  - 1.12.6 Measures for ensuring that existing rights of landowners are not affected and where they are affected, that compensation measures be implemented to mitigate for losses of any existing rights.
  - 1.12.7 All work areas must be supplied with proper sanitation facilities. Portable toilets (at least one for every twenty workers) must be deployed at the works areas and workers must use these facilities at all times. No use of the veldt is allowed for sanitation purposes. Workers transgressing this condition must be fined or removed from site.
  - 1.12.8 All works areas must have waste bins for general waste and such bins must be serviced regularly. All bins must be supplied with lids to ensure littering is prevented. Bins must be secured to prevent wild animals from spreading litter from such bins. Workers littering the site must be fined or removed from site.
  - 1.12.9 No open fires are allowed on site for heating or cooking purposes. The holder of the authorisation must ensure that the contractor have fire fighting equipment available at the work site in the event of accidental fires. Fire fighting equipment must be tested regularly for operation and workers must be trained in the use of such equipment. The holder of the authorisation will be responsible for all claims emanating from run-away fires caused by the construction work teams.

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- 1.12.10 Topsoil and spoil must be stored separately and topsoil must be stored in such a way as to ensure maximum protection of the quality of the topsoil to ensure the seed bank stays viable for rehabilitation purposes.
- 1.12.11 No protected species of vegetation may be destroyed without the required permit from the relevant competent authority.
- 1.12.12 No water may be abstracted from or effluent or waste water released into natural sources without the required permits.
- 1.12.13 Workshop areas for vehicle or plant servicing must have a concrete floor area for servicing of vehicles and plant.
- 1.12.14 All hydrocarbon containing fuels and lubricants must be stored inside a bunded area which can accommodate 110 percent of the stored liquids.
- 1.12.15 All spills of hydrocarbon materials shall be contained and cleaned up immediately and polluted soils shall be disposed of in a registered waste site. Minor spills can be treated on site.
- 1.12.16 Should it be necessary to service any vehicles or equipment due to a breakdown, a drip tray shall be used to prevent carbon spills onto the soil.
- 1.12.17 All hydrocarbon waste material generated shall be contained in proper storage drums for recycling or disposal at a registered waste site.

### **Monitoring of the activity during construction**

- 1.13 The holder of this authorisation must appoint a suitably qualified and responsible person that will act as an environmental control officer (ECO) that will have the responsibility of overseeing the implementation of the conditions of this authorisation and the requirements of the approved EMP.
- 1.14 The ECO must be appointed before the start of construction and the authorities must be notified of such an appointment for communication purposes.
- 1.15 The ECO must compile and present the environmental awareness induction training referred to in 1.10.1 above.
- 1.16 The ECO must submit a quarterly environmental compliance report, in writing, to The Director: Environmental Impact Evaluation and copy the holder of the authorisation with such report. This report must include a description of all activities on site, problems identified, transgressions noted and remedial action implemented. The report must reflect the Departmental reference number of the project on the cover page.

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- 1.17 The ECO must maintain the following:
- 1.17.1 Copies of all minutes of site meetings where environmental issues are discussed
  - 1.17.2 Copies of all reports submitted to the Department.
  - 1.17.3 A complaints register of all public complaints and the remedies applied to such complaints.
- 1.18 The ECO must remain employed until all rehabilitation measures, as well as site clean-up are completed and the site is handed over to the Applicant for operation.
- 1.19 The ECO must compile a report on all rehabilitation measures implemented for future monitoring and measurement of success of the rehabilitation measures during the operational phase of the development.

#### **Recording and reporting to the Department**

- 1.20 The holder of the authorisation must submit an environmental audit report to the Department upon completion of the construction and rehabilitation activities. The environmental audit report must –
- 1.20.1 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 EMP.
  - 1.20.2 The ECO may compile this report or the holder of this authorisation may appoint an external auditor to compile the report.

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

- 1.21 The authorised activities may not commence within thirty (30) days of date of signature of this authorisation. Commencement includes site establishment.
- 1.22 Should you be notified by the Minister of a suspension of the authorisation pending any appeals decision on the authorised activities, you may not commence with the activities unless authorised by the Minister in writing.

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**Notification to the authorities**

- 1.23 Thirty (30) days written notice must be given to the Department that the activity will commence. 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.
- 1.24 Thirty (30) days written notice must be given to the Department that the activity operational phase will commence.

**Monitoring of the activity during operation**

- 1.25 The operational phase management of the newly established infrastructure must be included in the operational management system of the existing infrastructure.
- 1.26 Should the responsibility for compliance with this authorisation be transferred to any other juristic person, the transfer of the environmental authorisation from the initial holder of the authorisation to any other juristic person must be formally recorded in writing and a copy of the transfer document indicating the contact details of the juristic person must be submitted to the Director: Environmental Impact Evaluation for record purposes. The transfer document must clearly indicate the DEA reference number.
- 1.27 Upon transfer of the management function of the development the future holder of the authorisation must take ownership of the implementation of the conditions of this environmental authorisation.

**Site closure and decommissioning**

- 1.28 Should the use of the facility 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.

**General**

- 1.29 A copy of this authorisation must be kept at the site office where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any

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- employee or agent of the holder of the authorisation who works or undertakes work at the property.
- 1.30 Where any contact details of the holder of the authorisation change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the holder of the authorisation must notify the Department as soon as the new details become known.
- 1.31 The holder of the authorisation must notify the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
- 1.32 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 applicant or his 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 applicant 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: 24 February 2010



**Ms Lize McCourt**  
**Chief Director: Environmental Impact Management**  
**Department of Environmental Affairs**

## Annexure 1: Reasons for Decision

### 1. Background

The applicant, Department of Water Affairs (DWA), applied for authorisation to undertake the following activities –

#### GN R. 386

- 1: *The construction of facilities or infrastructure, including associated structures or infrastructure, for –*
  - (o) *the bulk transportation of sewage and water, including storm water, in pipelines with –*
    - (i) *an internal diameter of 0,36 metres or more; or*
    - (ii) *a peak throughput of 120 litres per second or more;*
  - (p) *the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts;*
  - (q) *any purpose in the one in ten year flood line of a river or stream, or within 32 metres from the bank of a river or stream where the flood line is unknown, excluding purposes associated with existing residential use, but including –*
    - (i) *canals;*
    - (ii) *channels;*
    - (iii) *bridges;*
    - (iv) *dams; and*
    - (v) *weirs;*
  - (r) *the off-stream storage of water, including dams and reservoirs, with a capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of the activity listed in item 6 of Government Notice No. R. 387 of 2006;*
- 4: *The dredging, excavation, infilling, removal or moving of soil, sand or rock exceeding 5 cubic metres from a river, tidal lagoon, tidal river, lake, in-stream dam, floodplain or wetland.*
- 7: *The above ground storage of a dangerous good, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic metres but less than 1 000 cubic metres at any one location or site.*

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- 12: *The transformation or removal of indigenous vegetation of 3 hectares or more or of any size where the transformation or removal would occur within a critically endangered or an endangered ecosystem listed in terms of section 52 of the national Environmental management: Biodiversity Act, 2004 (Act 10 of 2004); and*
- 15: *The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.*
- 20: *The transformation of an area zoned for use as public open space or for a conservation purpose to another use.*

for the proposed de-bottlenecking of the existing pipeline supplying Lephalale with water through the construction of the proposed 9 km pipeline adjacent to the existing pipeline as indicated on the site layout plan as included in the basic assessment report (BAR), dated December 2009, Appendices A3 and A4, and as per the project description on page 7 of the BAR, which fall within the jurisdiction of the Lephalale Local Municipality of the Limpopo Province.

The applicant appointed an independent environmental assessment practitioner (EAP) NEMAI Consulting to undertake a basic assessment process and to compile a basic assessment report (BAR) as required by regulation GN R. 385: 22. The EAP appointed specialists whom compiled specialist studies and assessed the various potential impacts identified. The EAP compiled a BAR as required to comply with the requirements of GN R. 385: 23. Interested and affected parties (IAPs) and authorities commented on the BAR and comments were included in the report. The BAR was submitted to the Department for decision-making.

## **2. 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 December 2009;
- b) The comments received from interested and affected parties (IAPs) as included in the BAR;
- c) The contents of the draft EMP included in the BAR;
- d) The contents of specialist studies included in the BAR; and


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- 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).

### 3. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the BAR and draft EMP. Factors considered in making the decision is the following:


- a) The need and desirability for the construction of the proposed pipeline is understood.
- b) The positive aspects of the project in terms of the improved water transfer.
- c) The potential impacts of the proposed pipeline are assessed and no fatal flaws were identified on the proposed preferred route of the pipeline although there are some negative impacts associated with the construction activities.
- d) No alternative route options were investigated as the project proposes the de-bottlenecking of the existing pipeline and therefore requires the new pipeline to be constructed adjacent to the existing pipeline to make interconnections possible. The do-nothing option was investigated as part of the assessment process.
- e) A sufficient public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA regulations, 2006 for public involvement.
- f) The consultant appointed specialists to assist with the assessment of potential impacts and the specialists have recommended feasible and implement able mitigation measures to minimise potential impacts.
- g) The requirements of the Regulations, 2006, have been complied with in respect of this application for authorisation for construction of the proposed pipeline.
- h) The following issues were identified as of the most significance:
  - The potential impacts on wetlands;
  - The potential impacts on water supply;
  - Potential impacts on the hydrology of the water system; and
  - The potential impacts on bio-diversity.

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#### 4. Findings

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

- The proposed development is required to address a specific need for improved water transfer through an existing scheme and pipeline
- The project has definitive positive impacts on improved water transfer capacity of the scheme.
- The proposed pipeline will have a negative impact on wetlands and bio-diversity.
- The negative impacts can be mitigated to an acceptable level through the implementation of various mitigation measures as well as the conditions of the environmental authorisation.
- No significant environmental degradation will result directly from the activities applied for and authorised in this authorisation if the approved EMP and proposed mitigation measures in the BAR which form part of this authorisation is implemented.
- The Department is of the opinion that the positive impacts associated with the development outweigh the negative impacts in this proposal.
- A sufficient public participation process was undertaken and the consultant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2006 for public involvement.
- The procedure followed for the environmental impact assessment process has been adequate.
- Legal and procedural requirements have been met.
- Issues and comments relevant to the activity applied for are assessed in the BAR.
- The BAR is detailed and covers all aspects identified with regard to the proposed construction of the pipeline.
- Specialist studies compiled included the identification of mitigation measures for implementation during the construction phases.
- A draft EMP that complies with the requirements of the Regulations, 2006, was included in the BAR.
- The Applicant is capable of implementing the proposed conditions of the environmental authorisation and proposed mitigation measures.
- The principles of NEMA can largely be upheld.

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In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity 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 proposed activity can be mitigated to acceptable levels. The application is accordingly granted authorisation.

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