



# water & sanitation

Department:  
Water and Sanitation  
**REPUBLIC OF SOUTH AFRICA**

**KwaZulu-Natal Regional Office**  
Southern Life Building, 88 Joe Slovo Street, Durban, 4000; PO Box 1018, Durban, 4000

**Enq:** Miss N.M Mokoena  
Mr S Mnyango  
**File:** 16/2/7/ U203/D1/X1  
**Tel:** 031336 2789  
**Fax:** 031 305 9915  
**Email:** [mokoenan@dwa.gov.za](mailto:mokoenan@dwa.gov.za)

ACER (Africa) Environmental Consultants  
P.O Box 503  
Mtunzini  
3867

**ATTENTION: MR PAUL SCHERZER**

Dear Sir

**RE: DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT FOR THE PROPOSED ISUNDU 765/400 KV SUB-STATION AND TURN-IN TRANSMISSION LINES**

Reference is made to above-mentioned report received by this Office on the 08<sup>th</sup> November 2016.

This Department has the following comments with regard to the proposed development:

**(1) WATER USE AUTHORISATION/WETLANDS AND WATER COURSES**

- (1.1) It is noted from the above-mentioned report that the Applicant has delineated all wetlands according to this Department's guideline titled "*A practical field procedure for identification and delineation of wetlands and riparian areas*" (DWAf, 2005), and the Applicant is well aware that the proposed project will trigger Section 21 (c) and (i) of the National Water Act, 1998 (Act No. 36 of 1998) (NWA). However, this Department advises that a Water Use Authorisation Pre-Application meeting be arranged with Ms Zamashenge Hadebe who can be contacted on 031 336 2700/67.
- (1.2) It is understood that during operation, sewage flows will be minimal and sewage will be directed into a sealed conservancy tank of less than 10 000m<sup>3</sup>. Please note that installation of a conservancy tank will trigger Section 21 (g) of National Water Act, 1998 (Act No. 36 of 1998) (NWA).
- (1.3) If the proposed development/project engages or proposes to engage in one or more water uses that require a Water Use Licence in terms of the NWA, then by default all other water use activities taking place on that property, irrespective if it would be

SNP

regulated by a General Authorisation, would be required to apply for a Water Use Licence. This is part of the Integrated Water Use Licencing process.

- (1.4) There must be no unacceptable impact on the quality of both surface and groundwater in the area arising from the said development. Any rivers, associated tributaries and drainage lines must be protected at all times and must not be degraded by activities arising from this development.

## **(2) STORMWATER MANAGEMENT**

- (2.1) It is imperative that stormwater is properly managed along the proposed project route both during and after construction.
- (2.2) After construction, the area should be contoured to ensure free flow of runoff and to prevent ponding of water.
- (2.3) Drainage must be controlled to ensure that runoff from the project area will not culminate in off-site pollution or result in damage to properties downstream of any stormwater discharge.

## **(3) SOLID WASTE MANAGEMENT**

- (3.1) It is noted from the above-mentioned report that Durban Solid Waste (DWS) is currently responsible for provision of waste collection.
- (3.2) All solid waste generated at the proposed development, prior to being collected for safe disposal must not cause health hazard or any surface and groundwater pollution. Such waste must be stored under cover, in a designated storage/collection area; access control to this must be properly managed.

## **(4) SEWAGE AND WASTEWATER MANAGEMENT**

- (4.1) It is understood that portable toilets will be provided and utilised during the construction phase. It is this Department's experience that projects of this nature may result in the generation of small volumes of water containing waste. In this instance, the following is applicable:
- Water containing waste must not be discharged into the natural environment; and
  - Measures to contain the water containing waste and safely disposal of it must be implemented.
- (4.2) It is noted from the submitted report that conservancy tank of less than 10 000m<sup>3</sup> will be utilised during the operation phase. Please note that it has been this Department's experience that such a system (conservancy tank), if not properly managed, can result in a number of health, aesthetic and environmental problems, and is therefore not generally a favoured option. The high cost to both the developer and the municipality can result in the use of such a system being unsustainable in the long term. However, should it be deemed as being the BPEO, then the following conditions are applicable:

- The tank must be provided with a fresh air inlet and an intercepting grease trap;
- The tank must have an airtight manhole cover to allow access to the tank for the removal and safe disposal of the tank contents;
- No industrial waste or refuse may be discharged into the conservancy tank except by written agreement with the relevant authorities;
- The size of the conservancy tank must be determined by both the frequency of removal of its contents to the local Wastewater Treatment Works and by the quantity of sewage anticipated from the above-mentioned project. Written confirmation must be obtained from the local municipality stating that it will provide the service of removal of the tank contents;
- The contents of the tank must be removed by a vacuum tanker and conveyed to a local Wastewater Treatment Works that is capable of processing the volume and contents of the conservancy tank. On-going written confirmation must also be obtained from the local municipality and retained as proof that the contents of the conservancy tanks have been received for proper treatment at the said wastewater treatment works;
- A contingency plan must be drawn up to protect against overflow of the conservancy tank. A sump or lined pond can be designed below the conservancy tank to contain any overflows;
- Ingress of stormwater into the conservancy tank must be prevented;
- The conservancy tanks must be located out of the 1:100 year flood line of any water resources or alternatively, more than 100 metres from the edge of a water resource or a borehole which is utilised for drinking water or stock watering, whichever is further; and
- A detailed Geotechnical Investigation must be done to determine the most appropriate location of the conservancy tanks

**(5) EROSION CONTROL**

- (5.1) Soil erosion measures must be implemented to minimise soil erosion during the construction phase.
- (5.2) Erosion control measures to be implemented in areas prone to erosion such as near water supply points, edges of slopes, etc. These measures could include the use of sand bags, hessian sheets, retention or replacement of vegetation.

**(6) GENERAL**

- (6.1) This Department notes the content and recommendations made on the following studies:
- The Aquatic and Riparian Ecosystem Specialist Report, dated 23 November 2015, prepared by GroundTruth Water, Wetlands and Environmental Engineering;
  - Assessment of Anticipated Hydrological and Geohydrological conditions for the Proposed Project, dated December 2015, prepared by Earth Science Consultants;
  - Hydrological Assessment for the Proposed Project, dated May 2016, by GCS water and Environmental Consultants;
  - Vegetation and Wetland Specialist Study, dated September 2015, by ACER (Africa) Environmental Consultants.
- (6.2) This Department notes the content (i.e. responsibilities and conditions) as outlined in

5/10

the Draft Environmental Management Programme (EMPr) for the above-mentioned project, dated October 2016. Compliance to the approved EMPr must be audited regularly by the designated Environmental Control Officer (ECO.)

- (6.3) Adequate measures must be put in place to protect all water resources that flow adjacent to, as well as through the proposed project area, from being polluted and/or degraded. Visible markings showing/demarcating the buffers must be provided on site during the construction phase. If pollution of any surface or groundwater occurs, it must be immediately reported to this Department and the appropriate mitigation measures must be employed.
- (6.4) No form of secondary pollution should arise from the disposal of sewage and refuse. Any pollution problem arising from the above-mentioned development is to be addressed immediately by the Applicant.
- (6.5) Storage of material, chemicals, fuels, etc. must not pose a risk to the surrounding environment and this includes surface and groundwater. Such storage areas must be located outside the 1:100 year floodline of any watercourse and must be fenced off to prevent unauthorised access into the area. Temporary bunds must also be constructed around chemical or fuel storage areas to contain possible spillages.
- (6.6) Ecological sensitive areas and their appropriate buffers must be protected and should not be degraded by the activities arising from the proposed development.
- (6.7) A Spill Contingency or Emergency Response Plan must be drawn up and should include the following actions that need to be taken into account in the event of a spill:
- Stop the source of the spill;
  - Contain the spill;
  - All significant spills must be reported to this Department and other relevant authorities;
  - Remove the spilled product for treatment or authorised disposal;
  - Determine if there is any soil, groundwater or other environmental impact;
  - If necessary, remedial action must be taken in consultation with this Department; and
  - Incident must be documented.
- (6.8) Notwithstanding the above, the responsibility rests with the Applicant to identify any source or potential sources of pollution from his undertaking and to take appropriate measures to prevent any pollution of the environment. Failure to comply with the requirements of the National Water Act, 1998 (Act No. 36 of 1998) could lead to legal action being instituted against the Applicant.

Please do not hesitate to contact this Office should you have any concerns, comments or queries.

Yours faithfully,



for ACTING CEO: PONGOLA-UMZIMKULU PROTO CMA  
NM/nm/14312

Date: 19/04/2017