

**Basic Assessment and Water Use License  
Application Process for the Proposed  
Refurbishment and Additions to the eMondlo Bulk  
Water Supply Scheme located at eMondlo Town in  
the Abaqulusi Local and Zululand District  
Municipality, KwaZulu-Natal.**

**BACKGROUND INFORMATION DOCUMENT**

*01 April 2019*



**WHAT IS THE PURPOSE OF THIS DOCUMENT?**

The purpose of this document is to:

- ◆ Inform Interested and Affected Parties (I&APs) about the proposed project, and to invite them to participate;
- ◆ Provide a brief background on the proposed project; and
- ◆ Explain the aims and objectives of the Basic Assessment Process.



**WHAT IS THE BACKGROUND TO THIS DEVELOPMENT?**

The Zululand District Municipality has identified the need to undertake the refurbishment and additions to the existing eMondlo Bulk Water Supply Scheme located at eMondlo Town, south of Vryheid, in the Abaqulusi Local and Zululand District Municipality, KwaZulu-Natal.

The existing eMondlo Water Supply Scheme consists of a water abstraction tower in the Mvunyane Dam from which water is pumped via a pump station and steel and ductile iron pipeline to the eMondlo Water Treatment Works for purification. Once the water is purified it is then distributed to the greater eMondlo Area.

Urgent refurbishment is required at the Mvunyane Dam abstraction tower and pump station as the bulk suction pipe is leaking and the impellers of the pump are damaged. Major leaks have also been noted on the older sections of the bulk rising main, which needs to be replaced. In addition, the capacity of the Mvunyane Dam has decreased primarily due to the accumulation of silt especially in the surroundings of the abstraction tower. An area of approximately 3000m<sup>2</sup> needs to be dredged around the abstraction tower.

In terms of the National Environmental Management Act (107 of 1998), and the Environmental Impact Assessment (EIA) Regulations 2014 (as amended - 2017), published in Government Notices No. R. 327, 325 and 324 of 2017, certain Listed Activities require either a Basic Assessment Process (GNR 327 and GNR 324) or a Scoping and Environmental Impact Assessment Process (GNR 325) to be conducted in order to obtain Environmental Authorisation. The proposed activity triggers the following Listed Activities under GNR 327 which requires a Basic Assessment process to be conducted. It must be noted that during the process it may become apparent that additional triggers are relevant to the Application:

GNR 327 (2014, as amended – 2017)	Part 9	<p><i>The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water -</i></p> <ul style="list-style-type: none"> <li><i>(i) with an internal diameter of 0,36 metres or more; or</i></li> <li><i>(ii) with a peak throughput of 120 litres per second or more; excluding where -</i></li> </ul> <ul style="list-style-type: none"> <li><i>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or</i></li> <li><i>(b) where such development will occur within an urban area.</i></li> </ul> <p><b>A new 4km long 450mm/500mm diameter Ductile Iron/PVC-o pipeline will be installed to replace a section of the existing steel pipeline linking Mvunyane Dam and the eMondlo Water Treatment Works.</b></p>
GNR 327 (2014, as amended – 2017)	Part 12	<p><i>The development of—</i></p> <ul style="list-style-type: none"> <li><i>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</i></li> <li><i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more;</i></li> </ul> <p><i>where such development occurs –</i></p> <ul style="list-style-type: none"> <li><i>(a) within a watercourse;</i></li> <li><i>(b) in front of a development setback; or</i></li> <li><i>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -</i></li> </ul> <p><i>excluding -</i></p> <ul style="list-style-type: none"> <li><i>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i></li> <li><i>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</i></li> <li><i>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</i></li> <li><i>(dd) where such development occurs within an urban area;</i></li> <li><i>(ee) where such development occurs within existing roads, road reserves or railway line reserves; or</i></li> <li><i>(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.</i></li> </ul> <p><b>Part 12 may be applicable for the establishment of a silt disposal lagoon (coffer dam) for the disposal of silt dredged from the area surrounding the Mvunyane Dam abstraction tower.</b></p>
GNR 327 (2014, as amended – 2017)	Part 19	<p><i>“The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving -</i></p> <ul style="list-style-type: none"> <li><i>(a) will occur behind a development setback;</i></li> <li><i>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i></li> <li><i>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i></li> <li><i>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</i></li> <li><i>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies”.</i> <p><b>The proposed new 4km long pipeline will include river and wetland crossings along its route. The construction</b></p> </li></ul>

		of the pipeline will therefore require the removal of material from within a watercourse. Part 19 may also be applicable to the proposed dredging of the area surrounding the Mvunyane Dam abstraction tower. The applicability will be confirmed by the Competent Authority.
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Under Government Notice No R. 326 of 2017, the Applicant is required to appoint an independent Environmental Assessment Practitioner (EAP) to conduct the environmental authorisation process. The Applicant has appointed Green Door Environmental to conduct the necessary Basic Assessment process.

In addition to the above, the proposed activity constitutes Water Uses in terms of Section 21 of the National Water Act (NWA) (No. 36 of 1998) and requires a Water Use License Application (WULA), in terms of the following listed activities:

Section 21 of the NWA	S21(c)	<i>Impeding or diverting the flow of water in a watercourse. This is applicable as the proposed refurbishment and additions to the existing eMondlo Bulk Water Supply Scheme will take place within a regulated area. A regulated area is an area within the 1:100 year floodline or within a horizontal distance of 100m (whichever is greatest) of a watercourse or within a 500m radius from the boundary of a wetland.</i>
	S21(g)	<i>Disposing of waste in a manner that may detrimentally impact of a water resource. This may be applicable for the establishment of the silt disposal lagoon (coffer dam) for the disposal of silt dredged from the Mvunyane Dam. Applicability is to be confirmed by the Competent Authority.</i>
	S21(i)	<i>Altering the bed, banks, course or characteristics of a watercourse. This is applicable as the proposed refurbishment and additions to the existing eMondlo Bulk Water Supply Scheme will take place within a regulated area. A regulated area is an area within the 1:100 year floodline or within a horizontal distance of 100m (whichever is greatest) of a watercourse or within a 500m radius from the boundary of a wetland.</i>



## WHAT IS PROPOSED?

The following activities will be undertaken as part of the refurbishment of the existing eMondlo Bulk Water Supply Scheme:

### **Dredging of the Mvunyane Dam:**

The accumulation of silt in the Mvunyane Dam is currently obstructing the intake of water at the abstraction tower. An area of approximately 3000m<sup>2</sup> around the abstraction tower requires dredging, with the silt to be disposed of in a disposal lagoon (coffer dam) to be located adjacent to the Mvunyane Dam wall.

### **Refurbishment of the Abstraction Tower and Pump Station:**

The abstraction tower requires refurbishment with respect to the isolating valve and replacement of the existing suction and scour pipe. Four new pumps need to be installed in the existing pump station and the pump station building requires refurbishment, with the construction of a new office.

### **Installation of a new 4km Section of Rising Main:**

Approximately 4km of the existing Steel Rising Main linking Mvunyane Dam and the eMondlo Water Treatment Works has numerous leaks and has come to the end of its lifespan. A new 4km section of 450mm/500mm diameter Ductile Iron/PVC-o pipeline needs to be installed to replace the existing section of pipeline, including new air and scour chambers as required.

**Installation of a new 2.7km Section of Pipeline:**

Approximately 2.7km of the existing bulk water pipeline linking Mvunyane Dam to Purim has come to the end of its lifespan. A new 2.7km section of 125mm diameter uPVC pipeline needs to be installed to replace the existing section of pipeline, including new air and scour chambers as required.

**Refurbishment of the eMondlo Water Treatment Works:**

Several electrical and mechanical components need to be refurbished or replaced at the existing eMondlo Water Treatment Works. Some refurbishment of the building works is required as well as the replacement of the wash water recovery sump.

Refer to Figure 1 below for a locality map of eMondlo Bulk Water Supply Scheme.





## WHERE IS THE PROPOSED DEVELOPMENT?



**Figure 1:** Aerial map showing the location of eMondlo Bulk Water Supply Scheme, Abaqulusi Local and Zululand District Municipality, KwaZulu-Natal.



## WHAT IS THE AIM OF AN ENVIRONMENTAL BASIC ASSESSMENT (BA)?

The Basic Assessment process aims to:

- ◆ Inform and involve all potentially Interested and Affected Parties (I&APs) of the proposed development;
- ◆ Identify the potential impacts (positive and negative) that the proposed development may have on the ecological and socio-economic environment;
- ◆ Provide recommendations based on the identified impacts and conduct further specialist studies if necessary; and
- ◆ Provide the Department of Economic Development, Tourism and Environmental Affairs (DEDTEA) with enough information to make an informed decision regarding the proposed development.



## WHAT IS INVOLVED IN THE EIA PROCESS FOR BASIC ASSESSMENT?

The Basic Assessment process can be described as follows:

1. Application Form:

An official Application Form is required to be completed and submitted to the Competent Authority. This Form provides information on the property, a description of the activities at the facility and lists the relevant listed activities which are triggered.

2. Public Participation:

The general public and relevant Authorities are notified of the proposed development through newspaper adverts, site notices and direct consultation. Alternative methods will be employed to inform those I&APs who may be illiterate, disabled or otherwise disadvantaged. Should you be aware of anyone who might be interested in this project, but has not been notified, please send the relevant contact details to Green Door Environmental. This Background information Document will be circulated to neighbouring landowners, relevant authorities and any other persons registered as I&APs following the adverts and site notices.

3. Identification of Impacts and Alternatives

Environmental issues, concerns, development constraints and possible development alternatives will be identified using professional judgement, project information, experience of similar projects, a review of available literature, site visits, and consultation with authorities and the public.

4. Impact Evaluation

The significance of environmental issues will be evaluated in terms of their expected extent, intensity, duration and probability of occurrence.

5. Mitigation and Management Measures

Measures to manage and minimise impacts to within acceptable levels, as well as measures to maximise the socio-economic benefits associated with the development, will be identified and recorded in the Basic Assessment Report. An Environmental Management Programme (EMPr) will be compiled to facilitate the implementation of mitigation measures, if the development is approved.

6. Reporting

The Basic Assessment Report and Draft EMPr will be made available for review and comment by all I&APs and relevant authorities. A Final Basic Assessment Report and EMPr will be compiled and will include comments received on the circulated Basic Assessment Report.

7. Authority Decision

The Final Basic Assessment Report will be used by DEDTEA as the basis for the decision on whether the proposed development should be approved or not. All I&APs will be informed of the decision.



## WHAT POTENTIAL ENVIRONMENTAL IMPACTS HAVE INITIALLY BEEN IDENTIFIED?

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A proposed development of this nature has the potential to cause the following environmental impacts. These impacts will be investigated and assessed as part of this Application:

- ◆ Potential impacts on watercourses;
- ◆ Potential biodiversity related impacts;
- ◆ Potential heritage and paleontological related impacts; and
- ◆ Erosion related impacts.



## HOW CAN I&APs COMMENT ON THIS DEVELOPMENT?

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The need for public input and involvement is of critical importance. All I&APs (neighbours, authorities, organisations etc.) are invited to comment on the proposed project. Comments can be communicated to us by post, telephone or email (contact details are provided below).

In order to ensure that your comments are addressed and incorporated, please ensure that we have received all comments by **13 May 2019**.



**Postal:** PO Box 1170 Hilton, 3245  
**Physical:** Block H, Quarry Office Park,  
400 Old Howick Road, Hilton, 3245  
**Phone:** 033 343 4176 **Fax:** 033 343 4201  
**Email:** roxanne@greendoorgroup.co.za  
**Website:** www.greendoorgroup.co.za

Title:	First Name:	Surname:	Initials:
Organisation / Property Name:			
Interest in project (e.g. authority, neighbour, competitor, supplier):			
Postal Address:			
		Post Code:	
Tel Number:		Cell Number:	
Fax Number:		Email:	

1. The following issues must be noted regarding the proposed refurbishment and additions to the eMondlo Bulk Water Supply Scheme located at eMondlo Town in the Abaqulusi Local and Zululand District Municipality:

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2. The following potentially interested and affected parties should also be contacted:

Name:	Organisation:
Tel Number:	
Email Address:	
Name:	Organisation:
Tel Number:	
Email Address:	

3. Additional comments.

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**Should you be aware of anyone who might be interested in this project, but may be illiterate, disabled or otherwise disadvantaged, please send the relevant contact details to Green Door Environmental.**

*Thank you*