

Kinvig & Associates (PTY) Ltd, Suite 3 Park Village Suites, 24 Montrose Blvd., Victoria Country Club Estates, Montrose

> P.O. Box 1287 Hilton 3245

# BACKGROUND INFORMATION DOCUMENT (BID)

ENVIRONMENTAL BASIC ASSESSMENT (BA) FOR THE PROPOSED GREATER BULWER-DONNYBROOK BULK WATER SUPPLY SCHEME (GBDBWSS): HARRY GWALA DISTRICT MUNICIPALITY, KWAZULU-NATAL

#### 1 PURPOSE OF THIS DOCUMENT

**Kinvig and Associates** has been appointed by **Imvula Engineers**, on behalf of the **Harry Gwala District Municipality**, to conduct an Environmental Basic Assessment Process in terms of Regulation 21 to 25 of the Regulations compiled in terms of Chapter 3 of the National Environmental Management Act, 1998 (Act 107 of 1998). This project will be registered with the Provincial Department of Economic Development, Tourism and Environmental Affairs (EDTEA).

The purpose of this Background Information Document (BID) is to inform interested and / or affected parties (I&AP) of the Environmental Basic Assessment Process (BA) that will be conducted for The Greater Bulwer-Donnybrook Bulk Water Supply Scheme.

In addition to supplying information about the proposed Project, this BID will also provide I&AP's with the opportunity to:

- · Register as stakeholders in the public participation process; and
- Provide initial comments on the proposed project.

#### 2 BACKGROUND TO THE PROPOSED PROJECT.

The Harry Gwala District Municipality proposes to construct two hundred and seventy (270 km) kilometres of potable water pipe mains of diameter 110 mm to 550 mm, for the supply of water from the *Ngudwini* Dam and *Bulwer* Dam to new bulk water infrastructure in the Harry Gwala District Municipality. The proposed project infrastructure is indicated below:

- 270 km of potable water pipeline of size 110 mm to 550 mm with valve chambers;
- 2 abstraction points from existing Authorised dams (*Ngudwini* Dam and *Bulwer* Dam (under construction));
- 2 water treatment works;
- 2 main pump stations with 3 booster pump stations;
- 37 reservoirs with storage capacities ranging from 250KL to 10 ML; and
- Associated infrastructure.

The majority of the pipeline is proposed to follows existing road servitudes (alongside the R612 from the R617 to Donnybrook; and to the east on other un-named roads) connecting existing and new reservoirs and pipelines.

# 3 MOTIVATION FOR THE PROJECT

The proposed GBDBWSS is to provide potable water to communities in the Harry Gwala District Municipality. Currently, many of these communities are relying on an intermittent water supply. The current source of water is from boreholes, which are unreliable and in many cases are not able to supply water during the winter months, as they are exhausted, only to be recharged during the summer months when rainfall is more plentiful. This proposed project will improve the potable water supply to the Municipality, which will improve the lifestyle of the community.

# 4 PROPOSED CONSTRUCTION SCHEDULE AND METHODOLOGY

Depending on the issue date of the approval of the Environmental Authorisation (EA), and should an EA be granted by EDTEA, it is proposed that the GBDBWSS will commence with construction towards the fourth guarter of 2015.

### 5 SITE LAYOUT

The preliminary alignment for the proposed pipeline and reservoirs are indicated in **Figure 1** below. Should additional coordinate details be required they can be requested from Kinvig and Associates using the contact details in **Section 8**.

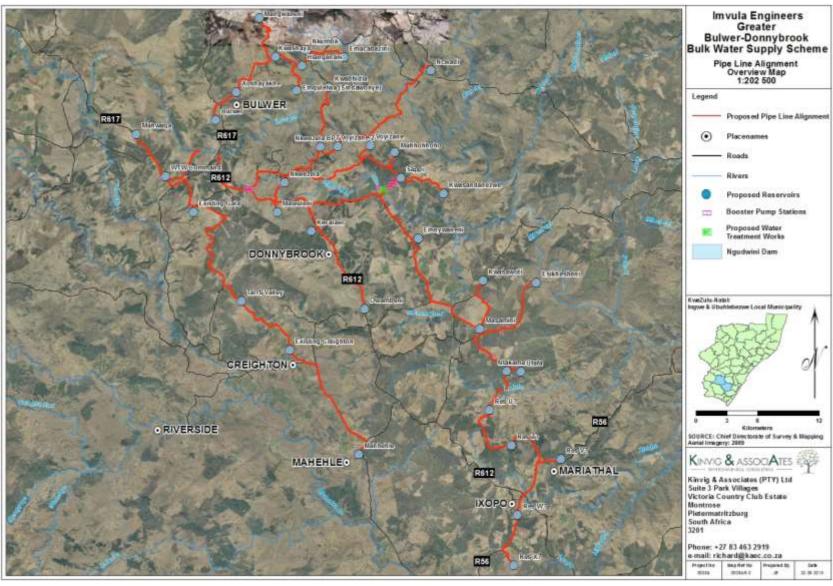


Figure 1: Pipeline Alignment Overview Map

# 6 LEGAL FRAMEWORK

The nature of the proposed project includes activities listed in the following Listing Notices – GNR 983 (Listing Notice 1) and GNR 985 (Listing Notice 3) in the EIA regulations (2014) promulgated in terms of the National Environmental Management Act (NEMA)

Table 1: Activities that will be triggered as a result of the proposed project.

Table 1. Activities	ies that will be triggered as a result of the proposed project.					
ACTIVITY No:	Legislation Extract					
Government Notice Regulation No. (GNR) 983 of 2014						
9.	The development of infrastructure exceeding 1000 m in length for the bulk					
	transportation of water or stormwater -					
	<ul><li>(i) with an internal diameter of 0.36 m or more; or,</li><li>(ii) with a peak throughput of 120 ℓ/s or more;</li></ul>					
	excluding where –					
	<ul><li>a) such infrastructure is for bulk transportation of water or storm water drainage inside a road reserve; or</li><li>b) where such development will occur within a urban area.</li></ul>					
	The project will consist of a network of pipelines exceeding 1000 m in length for the bulk transportation of water. These pipelines vary in diameter and throughput capacity, however, it is expected that portions will:  i. Have an internal diameter of 0.36 m or more; and ii. Have a peak throughput capacity of 120 l/s.					
	Note: The exclusions are not applicable even though the pipeline will occur in urban areas and follow road reserves as much as possible, however there are sections of the proposed pipeline that are to be aligned outside of these exclusions.					
12.	The development of:  (v) weirs, where the weir, including infrastructure and water surface area, exceeds 100 square metres in size;  (x) buildings exceeding 100 square metres in size;  (xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs  (a) within a watercourse;  (b) in front of a development setback; or  (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;  excluding  (dd) where such development occurs within an urban area; or  (ee) where such development occurs within existing roads or road reserves.  The project will consist of weirs, buildings and associated infrastructure exceeding 100 square metres and will cross watercourses or will be within 32m of watercourses.  Note: The exclusions are not applicable even though the pipeline will occur in urban areas and follow road reserves as much as possible, however there are sections of the proposed pipeline that are to be aligned outside of these exclusions.					

	The development of facilities or infrastructure for the off stroom storage of water
13.	The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.
	The project consists of 37 reservoirs of varying holding capacity.
19.	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) a watercourse;  The proposed infrastructure will cross watercourses and thus require infilling or deposition of material of more than 5 cubic metres or the dredging, excavation, removal or moving of soil, sand or rock of more than 5 cubic metres from or into a
	watercourse.
27.	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for  (i) the undertaking of a linear activity; or  (ii) maintenance purposes undertaken in accordance with a maintenance management plan.
	The proposed pipeline alignment meets the exclusion criteria of a linear activity, however the water treatment works, pump stations, reservoirs and associated infrastructure will exceed clearing of 1 hectare of indigenous vegetation but be less than 20 hectares.
30.	Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No.10 of 2004).
	The area is classified as a Critical Biodiversity Priority Area 1 (CBA), DAFF permit will be required in terms of the NEM:BA where protected trees or vegetation are identified.
31.	The decommissioning of existing facilities, structures and infrastructure for –  (ii) any expansion and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014;
	Old reservoirs will be decommissioned, upgrade and / or new reservoirs built in their place.
45.	The expansion of infrastructure for the bulk transportation of water or stormwater where the existing infrastructure-  (i) Has an internal diameter of 0.36 m or more; and  (ii) Has a peak throughput of 120l/s or more; and  (a) Where the facility or infrastructure is expanded by more than 1000 m in length; or  (b) Where the throughput capacity of the facility or infrastructure will be increased by 10% or more.

	The existing infrastructure will be expanded by more than 1 000 m in length and has an internal diameter of 0.36 m or more in sections and the throughput capacity of the infrastructure will be increased by 10% or more.					
49.	The expansion of-  (v) infrastructure or structures where the physical footprint is expanded by 100 m² or more; where such expansion or expansion and related operation occurs —  (a) Within a watercourse;  (c) if no development setback exists, within 32 of a watercourse, measured from the edge of a watercourse.					
	The existing infrastructure will be expanded by 100 m <sup>2</sup> or more; within a watercourse; or within 32 m of a watercourse, measured from the edge of a watercourse.					
56.	The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre  (i) where the existing reserve is wider than 13,5 metres; or  (ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas.  Existing roads will be extended to the water treatment works, reservoirs and for					
	operational and maintenance requirements.					
	otice Regulation No. (GNR) No relevant activities triggered, Scoping and EIA					
984 of 2014	process not triggered.  otice Regulation No. (GNR) 985 of 2014					
Covernment	The development of reservoirs for bulk water supply with a capacity of more than 250 cubic metres.					
2.	<ul> <li>(d) In KwaZulu-Natal:</li> <li>i. Trans-frontier protected areas managed under international conventions;</li> <li>ii. Community Conservation Areas;</li> <li>iii. Biodiversity Stewardship Programme Biodiversity Agreement areas;</li> <li>iv. World Heritage Sites;</li> <li>v. In an estuarine functional zone;</li> <li>vi. In a protected area identified in terms of NEMPAA, excluding conservancies;</li> <li>vii. Sites or areas identified in terms of an International Convention;</li> <li>viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</li> <li>ix. Core areas in biosphere reserves;</li> <li>x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose;</li> <li>xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</li> <li>xii. Outside urban areas: <ul> <li>(aa) Areas within 10 kilometres from national parks or world heritage sites or</li> </ul> </li> </ul>					

xiii. In urban areas: (aa) Areas zoned for use as public open space; (cc) Within urban protected areas. Reservoirs will be located within 10 km from national parks and 5km from protected areas identified by NEMPAA. The development of a road wider than 4 metres with a reserve less than 13,5 metres. (d) In KwaZulu-Natal: ii. Trans- frontier protected areas managed under international conventions; iii. Community Conservation Areas; iv. Biodiversity Stewardship Programme Biodiversity Agreement areas; v. World Heritage Sites; vi. A protected area identified in terms of NEMPAA; Sites or areas identified in terms of an International Convention; vii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; viii. Core areas in biosphere reserves; ix. Areas designated for conservation use in Spatial Development Frameworks 4. adopted by the competent authority or zoned for a conservation purpose; x. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xi. Outside urban areas: (aa) 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 areas of a biosphere reserve; or xii. In urban areas: (aa) Areas zoned for use as public open space; Within urban protected areas. (cc) Roads for operational and maintenance purposes will be created within 10 km from a national park and 5 km from a protected area identified in terms of NEMPAA. The clearance of an area of 300 square metres or more of indigenous vegetation except, where such clearance is required for maintenance purposes undertaken in accordance with a maintenance management plan. (b) In KwaZulu-Natal: ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. Within any critically endangered or endangered ecosystem listed in terms of 12. 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; v. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; vi. On land, where, at the time of the coming into effect of this Notice or thereafter

such land was zoned open space, conservation or had an equivalent zoning;

vii. A protected area identified in terms of NEMPAA, excluding conservancies; vii. World Heritage Sites; x. Sites or areas identified in terms of an International Convention; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; Clearance of 300 square metres and more will be cleared along the road reserve traversing the Xotsheyaka Nature Reserve in Bulwer town. The development of -(x) buildings exceeding 10 square metres in size; (xii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; (d) In KwaZulu-Natal: i. Community Conservation Areas; ii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iii. A protected area identified in terms of NEMPAA, excluding conservancies; iv. World Heritage Sites: ٧. Sites or areas identified in terms of an International Convention; Critical biodiversity areas or ecological support areas as identified in vi. systematic biodiversity plans adopted by the competent authority or in 14. bioregional plans; vii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; viii. Core areas in biosphere reserves; ix. Outside urban areas: (aa) 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; or In urban areas: (aa) Areas zoned for use as public open space; Areas designated for conservation use in Spatial Development (bb) Frameworks adopted by the competent authority, zoned for a conservation purpose; or Buildings exceeding 10 square metres will be created within 10 km from a national park and 5 km from a protected area identified in terms of NEMPAA.

The expansion of reservoirs for bulk water supply where the capacity will be

increased by more than 250 cubic metres.

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#### (c) In KwaZulu-Natal:

- i. Trans-frontier protected areas managed under international conventions;
- ii. Community Conservation Areas;
- iii. Biodiversity Stewardship Programme Biodiversity Agreement areas;
- iv. World Heritage Sites;
- v. In an estuarine functional zone;
- vi. In a protected area identified in terms of NEMPAA, excluding conservancies:
- vii. Sites or areas identified in terms of an International Convention;
- viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;
- ix. Core areas in biosphere reserves;
- x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose;
- xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;
- xii. Outside urban areas:
  - (aa) 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; or
  - (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or
- xiii. In urban areas:
  - (aa) Areas zoned for use as public open space;
  - (bb) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; or
  - (cc) Within urban protected areas.

Expansion of reservoirs will be created within 10 km from a national park and 5 km from a protected area identified in terms of NEMPAA.

The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.

- i. Community Conservation Areas;
- ii. Biodiversity Stewardship Programme Biodiversity Agreement areas;
- iii. In an estuarine functional zone;
- iv. A protected area identified in terms of NEMPAA, excluding conservancies;
- v. World Heritage Sites;
- vi. Sites or areas identified in terms of an International Convention;
- vii. Critical biodiversity areas or ecological support areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;

18.

- viii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;
- ix. Core areas in biosphere reserves;
- x. Outside urban areas:
  - (aa) 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; or
  - (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or
- xi. In urban areas:
  - (aa) Areas zoned for use as public open space;
  - (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or

Roads will be expanded within 10 km from a national park and 5 km from a protected area identified in terms of NEMPAA.

The expansion of -

- (x) buildings where the building is expanded by 10 square metres or more in size;
- (xii) infrastructure or structures where the physical footprint is expanded by 10 square metres or more;

Where such development occurs -

- (a) within a watercourse;
- (b) in front of a development setback adopted in the prescribed manner; or
- (c) if no development setback has been adopted, within 32 metres of a watercourse measured from the edge of a watercourse.

#### (e) In KwaZulu Natal:

- Community Conservation Areas;
- ii. Biodiversity Stewardship Programme Biodiversity Agreement areas;
- iii. In an estuarine functional zone;
- iv. A protected area identified in terms of NEMPAA, excluding conservancies;
- v. World Heritage Sites;
- vi. Sites or areas identified in terms of an International Convention:
- vii. Critical biodiversity areas or ecological support areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;
- viii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority:
- ix. Core areas in biosphere reserves;
- x. Outside urban areas:
- (aa) 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; or

23.

- (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or
- xi. In urban areas:
  - (aa) Areas zoned for use as public open space;
  - (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or

Expansion of buildings in watercourses or within 32m of watercourse will be created within 10 km from a national park and 5 km from a protected area identified in terms of NEMPAA.

#### 7 INVITATION TO PARTICIPATE

You have been identified as potential **Interested and Affected Parties (I&AP)** in this process and are invited to participate in the above process by registering yourself with **Kinvig and Associates**.

#### Your responsibility as an I&AP:

In terms of the EIA Regulations, your attention is drawn to your responsibilities as an I&AP:

- In order to participate in the EIA process, register yourself on the project database;
- Inform any other parties (neighbours, friends, colleagues, etc.) who may be interested and / or affected by the proposed project about the EIA process and encourage them to become involved;
- Ensure that any comments regarding the proposed projects are submitted within the timeframes
  that have been approved or set by the EDTEA, or within any extension of a timeframe agreed
  to by EDTEA and the applicant (i.e. Harry Gwala District Municipality);
- Disclose any direct business, financial, personal or other interest which you may have in the approval or refusal of the application for the proposed GMBWS.

#### **Our responsibilities as Independent Environmental Consultants:**

In terms of the EIA Regulations, our responsibilities in the public consultation process include:

- Ensure that sufficient information regarding this proposed project is made available to you, either through the BID or providing information as and when requested;
- Ensure that you have an understanding of the proposed project to be able to comment informatively and enable you to submit any concern in an informed manner;
- Ensure that the following actions are taken upon receiving any comments / queries / issues:
  - The contact details provided by you are entered into the project database and that you are sent all further information releases;
  - o If you send us queries or comments, we respond in writing;

 If you call us, your details and queries / comments are recorded. Should we not be able to answer your question immediately, your call will be returned as soon as possible with a response.

#### How to become involved:

- 1. Respond (by phone, fax or e-mail) to our invitation for your participation, which has been advertised in the printed media;
- 2. Mail, fax or e-mail the attached Registration and Comment Form to Kinvig and Associates;
- Attend the meetings to be held during the course of the project. Should you register as an I&AP
  you will automatically be invited to attend these meetings. The public meeting dates will also
  be advertised in the printed media;
- 4. Contact us telephonically should you have a query, comment or require further project information:
- 5. Review the draft Basic Assessment Report within the 40-day review periods that will be stipulated in the advertisement.

If you consider yourself an I&AP for this proposed project, we urge you to make use of the opportunities created by the public participation process to become actively involved in the process and provide comments or concerns which affect and / or interest you, or about which you would like more information. Your input into the process forms a key part of the Environmental Studies and we would like to hear from you to obtain your views on the proposed project.

By completing and submitting the accompanying Registration and Comment Form, you automatically register yourself as a I&AP for this proposed project, and are ensured that your comments and / or concerns raised regarding the proposed project are noted. The public participation consultant will respond to all comments and queries received during the course of the project.

Please be informed that all relevant public documents can be downloaded from **Kinvig and Associates** website (www.kaec.co.za ).)

We look forward to your contributions. Please also feel free to suggest other stakeholders to be consulted.

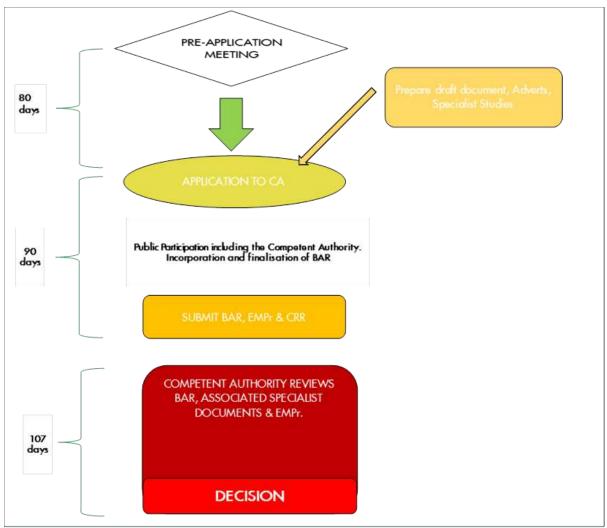


Figure 2: Public participation process for the Basic Assessment.

You will receive a notification, once registered, by fax or e-mail of all documents available for comment, and due dates for comment at every stage.

ENVIRONMENTAL BASIC ASSESSMENT (BA) FOR THE PROPOSED GREATER BULWER-DONNYBROOK BULK WATER SUPPLY SCHEME (GBDBWSS): HARRY GWALA DISTRICT MUNICIPALITY, KWAZULU-NATAL

# **REGISTRATION AND COMMENT FORM**

# WE WELCOME YOUR COMMENTS AND QUESTIONS

Please complete this form and return it to the Public Participation Office below:

PO Box 1287, Hilton,	3245			
Phone: (033) 3	347 1402			
Fax: (086) 6	78 4647			
E-mail: jono@	kaec.co.za			
Website: www.kaec.co.	za	ı	DATE:	
TITLE (Prof/Mr/Mrs)			IRST NAME	T
SURNAME		•	INST NAME	
CAPACITY				
ORGANISATION				
ORGANISATION				
POSTAL ADDRESS		P	OSTAL CODE	
TEL. NO.: ( )		С	ELL NO.:	
FAX NO.: ( )			-MAIL ADDRESS	
COMMENTS (You are w	elcome to use a senarat	e sheet if require	nd)	
The following environme	•	•	•	the EIA / BA:
Please add the followin	ntal, social and economi	c impacts must b	e addressed during	
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Contact details: Address: Tel.: E-mail: IF YOU WISH NOT TO PROJECT, AND PREFEBELOW AND RETURN CONTACT DETAILS AR	rtal, social and economic property of my colleagues / frequency fr	iends / neighbo Organisation  ER INFORMATION ROM THE PROJ	urs onto your mail  Cell:  DN REGARDING THECT'S DATABASE	ing list:

Jonathan Bailey

# 8 COMMENTS AND QUERIES

# Jonathan Bailey

PO Box 1287, Hilton, 3245

Phone: (033) 347 1402 Fax: (086) 678 4647 E-mail: <u>jono@kaec.co.za</u>

# LIST OF ACRONYMS

BID Background Information Document

**EDTEA** Department of Economic Development, Tourism and Environmental Affairs

**EA** Environmental Authorisation

**BA** Basic Assessment

EIA Environmental Impact Assessment
EMP Environmental Management Plan
I&AP Interested and Affected Parties

**NEMA** National Environmental Management Act