

4. BACKGROUND INFORMATION

Project applicant:	Sedex Desalination (Pty) Ltd		
Trading name (if any):	Sedex Desalination (Pty) Ltd		
Business reg. no./ID. no.:	2011/100451/07		
Contact person:	Mr Cyril V. Thomas		
Physical address:	9th Floor, Metropolitan Life Centre, 7 Coen Steytler Avenue, Cape Town, 8001		
Postal address:	P.O. Box 8399, Foreshore, Cape Town		
Postal code:	8012	Cell:	083 626 1318
Telephone:	021 446 6040	Fax:	021 446 6050
E-mail:	cthomas@frontierrareearths.co.za		

Project consultant/firm:	SRK Consulting (Pty) Ltd		
Business reg. no./ID. no.:	1995.012890.07		
Contact person:	Sharon Jones		
Postal address:	Postnet Suite #206, Private Bag X18, Rondebosch		
Postal code:	7701	Cell:	082 876 0638
Telephone:	021 659 3060	Fax:	021 685 7105
E-mail:	sjones@srk.co.za		
Qualifications:	MPhil in Environmental Management, BSc (Hons) in Environmental and Geographical Science.		

Landowner:	See List of Properties and Property Owners Details attached as Appendix A		
Business reg. no./ID. no.:			
Contact person:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

In instances where there is more than one landowner, please attach a list of landowners with their contact details to this application.

District Municipality	Namakwa District Municipality		
Local authority in whose jurisdiction the proposed activity will fall:	Kamiesberg Local Municipality		
Contact person:	Mr Joseph (Vissie) Cloete		
Postal address:	Private bag X200, Garies		
Postal code:	8220	Cell:	082 898 7853
Telephone:	027 652 8010	Fax:	027 652 8001
E-mail:	mm@kamiesberg.co.za		

Please note that a complete list of all organs or state and or any other applicable authority with their contact details must be appended to this application.
Please see List of Applicable Authorities attached as **Appendix C**

Project title:	Proposed Desalination Plant and Associated Infrastructure at Volwaterbaai, Namaqualand
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Brief project description	<p>Sedex is involved with the mining of a Rare Earth Element deposit and the beneficiation of ore to produce a mixed rare earth carbonate at the Zandkopsdrift Mine, 30 km south of the town of Garies in the Northern Cape Province.</p> <p>Sedex Desalination (Pty) Ltd proposes the construction of a 3M m³/a seawater desalination plant, including associated infrastructure and services at Volwaterbaai (close to Abraham Villiers Bay) to supply demineralised water via a transfer pipe to the Zandkopsdrift Mine. The project will include:</p> <ul style="list-style-type: none"> • The construction of a desalination plant at Volwaterbaai with a footprint of approximately 5ha; • The provision of seawater extraction infrastructure comprising of open seawater intake in the sea, close to the desalination plant; • The provision of brine discharge infrastructure including brine discharge pipelines into the sea; • The construction of an access road from Kotzesrus to the desalination plant as well as a maintenance track for access to the seawater extraction and brine discharge infrastructure; • The potential upgrade of the existing road between Kotzesrus and the Zandkopsdrift mine; • The construction of water transfer and storage infrastructure, including a pipeline from the desalination plant through Kotzesrus to a raw water storage reservoir at Zandkopsdrift and a water storage reservoir and booster pumps at
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- Kotzesrus;
- The provision of electrical supply infrastructure including:
 - MVA at 11kV bulk power from the minerals process plant at Zandkopsdrift Mine to the desalination plant;
 - Step-down transformers at Zandkopsdrift Mine, Kotzesrus and the desalination plant; and
 - All other electrical infrastructure (including equipment and reticulation to power all equipment and back- up generator/s); and
 - The provision of accommodation and associated infrastructure for approximately 10 staff at the desalination plant, including a small septic tank from management of sewage.

Project Location:

Desalination Plant at **Volwaterbaai**, Abraham Villiers Bay, on the west coast of the Northern Cape Province, with associated infrastructure from Volwaterbaai inland, past Kotzesrus as far the Zandkopsdrift mine.
 A full list of affected properties is attached to this application (see **Appendix A**).
 A locality map showing the location of the proposed desalination plant and associated infrastructure is attached as **Appendix B**.
 (Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

Closest Town(s) or district(s):

Kotzesrus	Distance (in km):	15km southwest of desalination plant
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Physical address:

See List of Properties and Property Owners Details attached as **Appendix A**

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning:

See List of Properties and Property Owners Details attached as **Appendix A**

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Coordinates: (of desalination plant)

Latitude:	31	01'	51.77	South
Longitude:	17	41'	45.48	East

Property size:

See List of Properties and Property Owners Details attached as **Appendix A**

Is a change of land-use or a consent use application required?

YES	NO
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Must a building plan be submitted to the local authority?

YES	NO
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Locality map:

A locality map must be attached to back of this document, as Appendix B. The scale of the locality map must be at least 1:50 000. The scale must be indicated on the map. The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow.

5. ACTIVITIES APPLIED FOR

An application may be made for more than one listed or specified activity that, together, make up one development proposal. All the listed activities that make up this application must be listed.

Indicate the number and date of the relevant notice: Activity No (s) (in terms of the relevant or notice) : Describe each listed activity:

GN R544 (18 June 2013)		
544, 18 June 2010	9	The development will include the construction of between 37 and 44km of pipeline (approximately) depending on the final route alignment. This will include seawater intake pipelines feeding the desalination plant, brine discharge pipelines from the desalination plant as well as pipelines transferring processed water from the desalination plant to the mine at Zandkopsdrift. The design of the pipelines has not yet been finalised, although it is likely that this activity would be applicable.
544, 18 June 2010	11	The development will include the construction or upgrade of a road between the Zandkopsdrift Mine and the desalination plant at Volwaterbaai, as well as a pipeline for the transportation of water from

		indigenous vegetation within a CBA as well as within a littoral active zone and portions of land within 100m inland of the HWM of the sea.
546, 18 June 2010	13	The proposed development would require the clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, within 1 kilometre from the HWM of the sea.
546, 18 June 2010	14	The proposed development falls outside of an urban area and would require the clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.
546, 18 June 2010	16	The desalination plant and associated infrastructure exceeding 10 square metres or more would be within 1 kilometre of the HWM of the sea. In addition, roads and pipelines would cross a number of water courses, as well as a CBA, triggering this activity.
546, 18 June 2010	19	Existing roads will be lengthened to construct a road between the mine at Zandkopsdrift and the desalination plant at Volwaterbaai. Portions of the road will pass through or in close proximity to a CBA, various watercourses as well as the HWM of the sea.
546, 18 June 2010	24	Existing roads may be expanded in areas where they cross water courses, some of which may occur within a CBA or within 1 kilometre of the high-water mark of the sea.
GN R545 (18 June 2013)		
545, 18 June 2010	5	The proposed development will include the discharge of brine from the desalination plant as well as some solid material: sand, grit, shells etc back into the sea along with the brine. This will require a Coastal Waters Discharge Permit in terms of the National Environmental Management: Integrated Coastal Management Act 24 of 2008 (NEM: ICMA). The need for an application in terms of the National Environmental Management: Waste Act 36 of 1998 (NEM: WA) is still to be confirmed.
545, 18 June 2010	14	The project will include the construction of seawater intake and brine discharge infrastructure which would include permanent structures in the littoral active zone as well as pipelines anchored to the sea bed.

Please note that any authorisation that may result out of this application will only cover activities applied for. Omissions may render any authorisation that is based on incomplete information to be nil and void.

6. OTHER AUTHORISATION REQUIRED

3.1 Do you need any Authorisation in terms of any of the following laws?

3.1.1	National Environmental Management Act: Waste Act	Yes	No ¹
3.1.2	National Environmental Management Act : Air Quality Act	Yes	No
3.1.3	National Environmental Management Act : Protected Areas	Yes	No
3.1.4	National Environmental Management Act : Biodiversity Act	Yes	No
3.1.5	Mineral Petroleum Development Resources Act	Yes	No
3.1.6	National Water Act	Yes	No
3.1.7	National Heritage Resource Act	Yes	No
3.1.8	Other (Please Specify)		
	National Environmental Management: Integrated Coastal Management Act	Yes	No
	National Water Act	Yes	No

3.2 Have such applications been lodged already?

Yes	No
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7. TYPE OF APPLICATION

4.1. Application for Basic Assessment (BA)

Is this an application for conducting a basic assessment (as defined in the regulations)?

YES	NO
YES	NO

If, YES, is a basic assessment report attached?

If, NO, please indicate when the basic assessment report will be submitted:

N/A

4.2. Application for Scoping and Environmental Impact Assessment (EIA)

¹ Based on discussions with DEA: Oceans and Coasts it is not anticipated that the discharge of brine to the ocean would require an application to the NEM:WA. Similarly, based on discussions with the Western Cape DEA&DP: Waste Directorate it is not anticipated that an application would be required for the septic tank associated with staff accommodation at the desalination facility.

Is this an application for Scoping and EIA (as defined in the regulations)?

YES	NO
YES	NO

If, YES, is a Scoping Report and Plan of Study for EIA attached?

If, NO, please indicate when the Scoping Report and Plan of Study for EIA will be submitted:

The Scoping Report and Plan of Study for EIA will be submitted at the conclusion of the Scoping Phase - ~ September 2013.

The scoping report and/or the plan of study for EIA will be submitted after consultation with the competent authority:

YES	NO
YES	NO

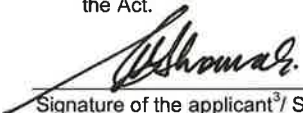
A consultation with the competent authority is hereby requested:

8. Declarations

5.1 The Applicant

I, Cyril Victor Thomas, declare that I -

- am, or represent², the applicant in this application;
- have appointed an environmental assessment practitioner to act as the independent environmental assessment practitioner for this application;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment Regulations, 2010, including but not limited to –
 - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
 - costs incurred in respect of the undertaking of any process required in terms of the Regulations;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the Regulations;
 - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
 - the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of these Regulations and will take reasonable steps to verify whether the EAP complies with the Regulations;
- will inform all registered interested and affected parties of any suspension of the application as well as of any decisions taken by the competent authority in this regard;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify the Government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action which the applicant or environmental assessment practitioner is responsible for in terms of these Regulations;
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to obtaining an environmental authorisation or prior to an appeal being decided in terms of these Regulations;
- will perform all other obligations as expected from an applicant in terms of the Regulations;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.


Signature of the applicant³/ Signature on behalf of the applicant:

Sedex Desalination (Pty) Ltd.

Name of company (if applicable):

Date


Signature of the Commissioner of Oaths:

22/04/13

Date:

Designation:

JACQUES NAUDÉ
Official stamp (below):
Commissioner of Oaths
Practising Attorney R.S.A.
1st Floor, ABSA on Grove
No. 11 Grove Ave., Claremont 7708

² If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached.

³ If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.

5.2 The Environmental Assessment Practitioner

I, SHARON JONES declare that --

- I act as the independent environmental practitioner in this application
- I act independently
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;


Signature of the environmental assessment practitioner:

SRK Consulting (Pty) Ltd

Name of company:

22 April 2013

Date:

Signature of the Commissioner of Oaths:


Date:

22/04/13

Designation:

Official stamp (below):

JACQUES NAUDÉ
Commissioner of Oaths
Practising Attorney R.S.A.
1st Floor, ABSA on Grove
No. 11 Grove Ave., Claremont 7708

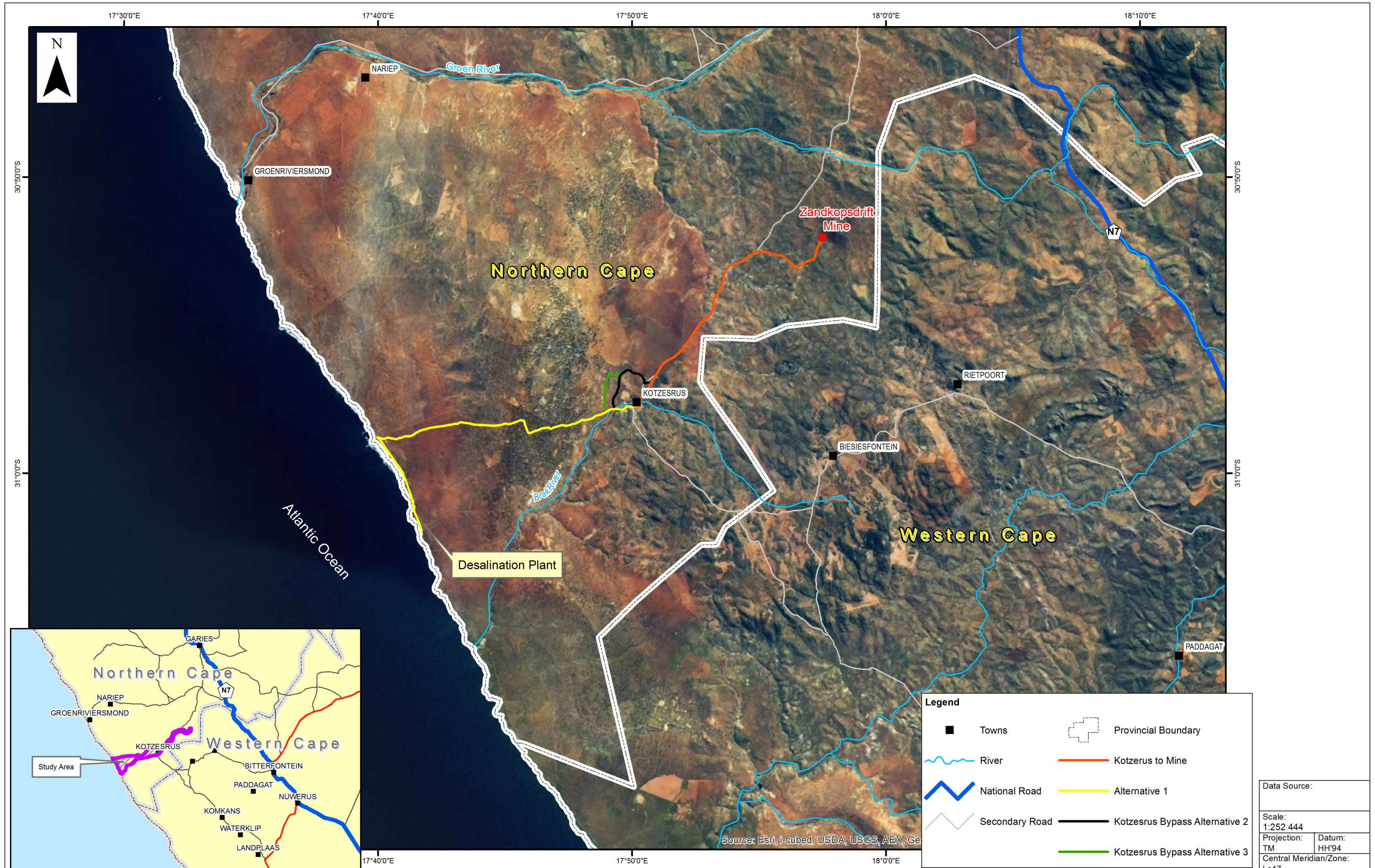
Appendix A

List of Properties and Property Owners Details

Appendix A: List of Properties and Property Owners Details										
Property Owner	Contact Person	Farm Name	Farm Size	Property Zoning	Physical Address	Postal Address	Telephone	Cell Phone	E-mail	SG21 digit code
Mr Isak Abraham Nieuwoudt	Braam Nieuwoudt	Portion 1 of Brakfontein 555 (Nieuwefontein)	293.67 ha	Agriculture	Blouklip, Kotzesrus	PO Box 190, Lutzville, 8165	027 531 1066		blouklip@nashuaisp.co.za	C05300000000055300001
Mr CA Louw	Carel Louw	Portion of Hendriksvlei, Portion 1 and Remainder of Brakfontein 551, Portion 5 of Klipheuwel, Remainder of Varsfontein 544	2500 ha	Agriculture	Wolwekraal, Springbok (Gamoep omgewing)	PO Box 96, Springbok, 8240	027 718 1127 (springbok) 027 531 1224 (Kotzesrus)	072 3587999		C05300000000055100000/1 & C05300000000053800005 & C05300000000055400000
Mrs Tilma Nel	Fanie Nel	Remainder of Farm Nuwebegin 641	approx 2040 ha	Agriculture	Mr Fanie Nel, Kotzesrus	PO Box 75, Garies, 8220	027 5311035			C05300000000064100000
Buchuberg Exploration and Farming	An Cornelissen	Portion 6 which is a Portion of Portion 5 Hendriksvlei	739.44 ha	Agriculture	Hendriksvlei 552 Portion 6	130 Miller Street, Gordons bay, 7140	027 531 1008 (Kotzesrus)	082 6581300		C05300000000055200006
Mr AJ Cornelissen	Adriaan (Ad) Cornelissen	Welgemeend Portion 2 of Varsfontein 554 (Consolidated)	1706 ha	Agriculture	Mr AJ Cornelissen, Kotzesrus	PO Box 366, Garies, 8220	027 5311034			C0530000000005540002
de Beers Consolidated Mines Ltd	Rob Blake	Riet Veldt 558	1245 ha	Agriculture	Riet Veldt 558	Private Bag X01, Kleinsee, 8282	027 807 2101		rob.blake@debeersgroup.com	C05300000000055800000
Sedex Minerals (Pty) Ltd	Cyril Thomas	Portion 2 of Zandkopsdrift 573	58862 ha	Agriculture	Portion 2 of Zandkopsdrift	PO Box 8399, Foreshore, Cape Town, 8012	021 4466040		cthomas@frontierrareearths.co.za	C05300000000053700002
Sedex Minerals (Pty) Ltd	Cyril Thomas	Strandfontein 559	12258.6860 ha	Agriculture	Strandfontein 559	PO Box 8399, Foreshore, Cape Town, 8012	021 4466040		cthomas@frontierrareearths.co.za	C05300000000055900000

Appendix B

Locality Map



Legend	
■	Towns
⬭	Provincial Boundary
~	River
—	Kotzesrus to Mine
⚡	National Road
—	Alternative 1
—	Kotzesrus Bypass Alternative 2
—	Secondary Road
—	Kotzesrus Bypass Alternative 3

Data Source:	
Scale: 1:252 444	
Projection: TM	Datum: HH'94
Central Meridian/Zone: Lo17	
Date: 19 03 2013	Compiled by: GILB
Project No: 451101	Fig No: 1
Revision: A Date: 19 03 2013	



**PROPOSED DESALINATION PLANT AND ASSOCIATED INFRASTRUCTURE AT VOLWATERBAAI, NAMAQUALAND
LOCALITY PLAN**

Appendix C

List of Applicable Authorities

Appendix C: List of Applicable Authorities							
Organisation	Contact Person	Capacity	Postal Address	Telephone	Fax	Cell Phone	E-mail
Northern Cape Provincial Government	Wonders Dimakatso Viljoen Mothibi	Head of Department: Agriculture, Land Reform and Rural Development	Private Bag X5018, Kimberly, 8300,	053 838 9102	053 831 3635	083 448 9151	cfortune@agri.ncape.gov.za
Kamiesberg Local Municipality	Joseph (Vissie) Cloete	Municipal Manager	Private Bag X200, Garies, 8220	021 652 8010		082 898 7853	mm@kamiesberg.co.za
Department of Environmental Affairs (DEA): Oceans and Coasts	Razeena Omar	Chief Directorate: Integrated Coastal Management	2 East Pier Shed, 2 East Pier Rd, V & A Waterfront, Cape Town, 8002	021 819 2450	021 407 3009	083 530 3127	nbpillay@environment.gov.za / mtshikot@environment.gov.za
Northern Cape Department of Environmental Affairs and Nature Conservation (NCDENC)	Chamuwari Ketano	Environmental Officer - Production Grade C: Impact Management Department Of Environment and Nature Conservation	Private Bag X 6120, Kimberley, 8300	053 807 7430 / 053 807 7466	053 831 3530	079 5172764	cketano@ncpg.gov.za
Department of Water Affairs (DWA)	Mashudu Ranwedzi	Acting Manager for Lower Orange Water Management Area	Private Bag X6101, Kimberley, 8300	054 338 5800/ 053 830-8804	072 463 7820	053 830-8804	ranwedzim@dwa.gov.za
Department of Agriculture and Land Affairs	Viljoen Mothibi	Head of Department	Private Bag X5018, Kimberley, 8300	053 838 9100	053 831 3635		tperkins@grand.ncape.gov.za
Department of Minerals and Energy: Northern Cape (Springbok)	Jasper Nieuwoudt	Regional Manager	Private Bag X 14, Springbok, 8240	027 712 8160		027 712 1959	jasper.Nieuwoudt@dmr.gov.za
South African Heritage Resources Agency (SAHRA)	Jenna Lavin	Heritage Officer	PO Box 4637, Cape Town, 8000	021 462 4502	021 462 4509		jenna.Lavin@pgwc.gov.za
CapeNature	Alana Duffell-Canham	Land Use Advice	Private Bag X5014, Stellenbosch, 7599	021 866 8029	082 727 2691	021 866 1523	aduffell-canham@capenature.co.za
Wildlife and Environmental Society of South Africa (WESSA)	Susanne Erasmus	Chairperson: Northern Cape Region	P O Box 316, Kimberly, 8300	053 839 2717		053 842 1433	wessanc@yahoo.com
South African National Biodiversity Institute (SANBI)	Jeff Manuel	Deputy Directory Biodiversity Mainstreaming	Centre for Biodiversity Conservation, South Office 33, Kirstenbosch Botanical Gardens	021 7998804		084 722 5922	j.manuel@sanbi.org.za
Endangered Wildlife Trust (EWT)	Yolan Friedmann	Chief Executive Officer	Private Bag X11, Parkview, 2122	011 372 3600 / 1 / 2 / 3		011 608 4682	ewt@ewt.org.za