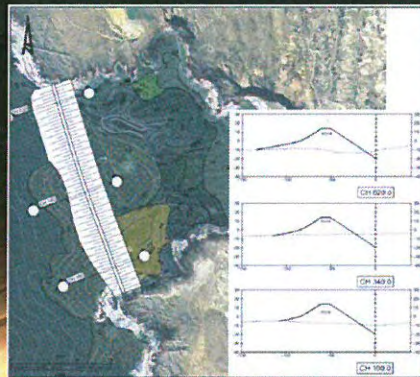


Figure d-6:
Three phases of proposed shoreline accretion within Mitchell's Bay



Page 34

Figure d-7:
Layout and sections for a proposed dynamically stable rock berm for the
closure
of Mitchell's Bay



Page 35

Generic design

- A more generic design involving either statistically stable rock berms, or these in combination with dynamically stable berms, is being considered for other potential mining sites characterised by either a rocky shoreline or a shoreline of mixed sand and rock
- The generic design is proposed for the Noup, Visbeen, Koingnaas, Langklip Central and Langklip target areas

Page 36

Figure d-8:

Layout of a generic rock berm with a conventional statistically stable armour slope

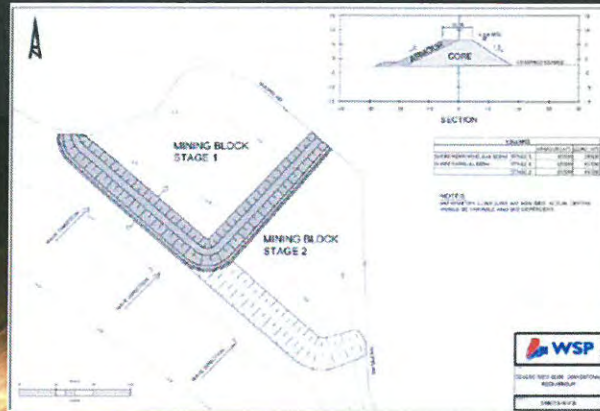
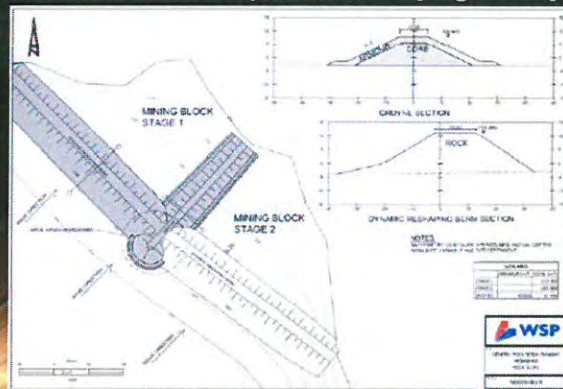


Figure d-9:

Layout of an alternative generic design using a conventional statistically stable groyne in combination with a dynamic re-shaping shore-parallel berm



Sites for slimes disposal

- Existing mining voids in mined out areas were identified in central areas where processing plants would be placed over the life of the operation
- The bedrock profiles in each of these areas were checked to ensure that the bedrock slope dipped towards the coast and that the site was within 1 km from the coastline
- These attributes ensure that any seepage of seawater associated with the slimes would end up back in the ocean
- There are no fresh water sources, other than rain water in the region of the selected slimes sites

Sites for slimes disposal

- Placing of the fine fraction of the waste below natural ground level or behind existing overburden dumps reduces windblown dust
- No chemicals are used in the beneficiation process
- The material is mainly transported quartzite, with no AMD potential
- A detailed civil engineering design was completed for each of the sites
- The proposed slimes facilities are indicated in Figure d-10

Sites for slimes disposal



Applicable legislation and guidelines

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED
Mineral and Petroleum Resources Development Amendment Act, (Act No. 49 of 2008) (MPRDA).	An application for environmental authorisation has been lodged with DMR.
Mineral and Petroleum Resources Development Act, (Act No. 28 of 2002).	Financial provision has been calculated and is indicated in the Quantum Report, which is included in the Environmental Impact Assessment Report.
National Environmental Management Act, (Act No. 107 of 1998).	An application for environmental authorisation has been lodged with DMR.
National Environmental Management Act, (Act No. 107 of 1998): Environmental Impact Assessment Regulations, 2014.	An application for environmental authorisation has been lodged with DMR. The applicable listed activities are discussed in Section d (i) of the Scoping Report.



Applicable legislation and guidelines

National Environmental Management Laws Amendment Act, (Act No. 107 of 1998).	An application for environmental authorisation has been lodged with DMR.
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) List of Waste Management Activities: Govt Notice No. 921 of 29 Nov 2013 as amended by Government Notice No. R332 of 2 May 2014 and as also amended by Govt. Notice No. R633 of 24 July 2015.	An application for environmental authorisation has been lodged with DMR. The applicable listed activities are included in Section d (i) of the Scoping Report.



Applicable legislation and guidelines

National Environmental Management : Air Quality Act (Act No. 39 of 2004).	The provisions of the Act have been included in the compilation of mitigation measures in Section h (viii) and (i) (ix).
National Environmental Management : Air Quality Amendment Act (Act No. 20 of 2014).	
National Environmental Management : Air Quality Act (Act No. 39 of 2004); National Ambient Air Quality Standards, 2009.	
National Environmental Management : Air Quality Act (Act No. 39 of 2004); National Dust Control Regulations, 2013.	
National Environmental Management : Biodiversity Act (Act No. 10 of 2004).	The provisions of the Act and Regulations have been used in the compilation of mitigation measures in Section h (viii) and (i) (ix).



Applicable legislation and guidelines

National Environmental Management: Biodiversity Act (Alien and Invasive Species Regulations, 2014).	The mitigation measures section considers that alien invasive species management.
National Environmental Management: Biodiversity Act (Publication of national list of invasive alien species).	
National Environmental Management: Integrated Coastal Management Act, (Act No. 24 of 2008).	An application for environmental authorisation has been lodged with DMR. The applicable listed activities are included in Section d (i) of the Scoping Report. The provisions of the Act have also been used in the compilation of mitigation measures in Section h (viii) and (i) (ix).
National Environmental Management: Integrated Coastal Management Amendment Act, (Act No. 36 of 2014).	

Applicable legislation and guidelines

Northern Cape Nature Conservation Act, (Act No. 9 of 2009).	The Biodiversity assessments will consider this legislation.
National Development Plan: Operation Phakisa.	The National Development Plan goals and objectives have been considered in the development of socio-economic strategies.
Environmental Management Framework and Strategic Environmental Management Plan for Namakwa District Municipality, 2011.	These frameworks will be considered in the assessments and development of mitigation measures.

Page 46

Figure h-2:
Current slimes dam alternative sites of which six are preferred (A, C,H,G,D and E)



Page 47

Details of the public participation process followed

To date the activities outlined below were executed:

- Pre-consultation meetings held with competent and commenting authorities:
 - DMR on 09 March 2015
 - DAFF on 14 September 2015
 - DENC on 15 September 2015
 - DEA: Oceans and Coasts on 18 September 2015
- An advert was placed on the Namakwalander newspaper on 04 March 2016
- Site notices were erected on site and other strategic places on 04 March 2016

Page 48



...Continuation

- Due to suspected technical glitches on the newspaper printing process, re-advertisement process was done
- Site notices were re-erected on site and other strategic places on 11 March 2016
- Copies of the scoping report were sent to authorities on 16 March 2016, via email web link
- Copies of scoping report were placed for review by stakeholders
 - Koingnaas Mine Office
 - Springbok Library
 - WCR Offices



Summary of issues raised by I&APs

- Overlap of proposed mining activities with proposed MPAs and with Operation Phakisa
- Potential conflict with abalone ranching rights holders regarding water quality and habitat loss, particularly those companies that have already started seeding juveniles
- Increased turbidity near mining site(s) may compromise water quality at the seawater intakes to land-based abalone farms. The impacts of suspended sediment plumes and elevated turbidity as a result of mining operations need to be assessed
- Increased turbidity near mining site(s) may impact filter feeders
- Requirements for discharge permits regarding discharges to the sea (particularly from diver-assisted shore units) is unclear



....Continuation

- Blasting in the marine environment should be avoided and materials used for the construction of berms re-used as much as possible
- Concern regarding the introduction of non-native material onto the beach during berm construction
- Concern regarding the disturbance to marine habitats and associated biota through mining in subtidal areas. The impacts associated with coffer dam construction vs. accretion need to be carefully considered
- As seal colonies are unique habitats within the project area these should be mapped, and information available at DAFF and DEA should be used



....Continuation

- Quantitative marine baseline studies focussing on the specific mining sites need to be undertaken
- Provide DEA with information on the experimental design of baseline and monitoring studies prior to commencement of surveys
- WCR to give consideration to co-ordination of monitoring programmes with DEA and sharing of research information. Baseline and monitoring studies should focus both on rocky habitats (including an assessment on the impacts on reef structure) as well as sandy beach habitats.
- The recovery of these habitats following mining needs to be understood from the perspective of species recruitment and colonisation.

Page 52



....Continuation

- Monitoring programmes should be co-ordinated to ensure an upfront understanding of sensitive habitats in the project area, with subsequent avoidance of these in the mine plans
- WCR to give consideration to implementing a SEA approach in partnership with other role players in the area so as to gain a broader understanding of the coastline rather than focusing on the project specific sites
- Decommissioning and closure is required of old mining sites no longer used; As active rehabilitation below LWM is not practicable, there is a concerns that wave action may not be sufficient to ensure natural rehabilitation of berms.

Page 53



....Continuation

- Impacts of mining activities on abalone ranching community and the economic effect of such impact on the regional socio-economic contribution of this mariculture economic activity.
 - It is believed that it would be unlikely that the DCA abalone ranching initiative would be viable if DCA were excluded from the majority of the suitable seeding sites in NC Zone 4 for significant periods of time.
 - It is believed that the DCA abalone ranching initiative would not be viable if there is significant habitat destruction and/or if seeded abalone is destroyed through mining operations.

Page 54

....Continuation

- Ensuring that rehabilitation objectives are met
- Ensuring that the land claim aspects within the application area are understood and dealt with according to the proper process guided by the administrative and legislative requirements
- Ensuring transparency in communication with stakeholder and that human rights are upheld
- It is believed that WCR does not conduct EIA and this must be done and the company must propose management measures that will mitigate against the negative environmental impacts

Page 55

....Continuation

- WCR to look for opportunities to support community livelihoods
- Post mining land use considerations must be done in collaboration/consultation with the community
- The pre- consultative meeting with regulatory authority, to discuss design and process approaches and possible interactions with aquaculture industry were acknowledged and appreciated
- Potential conflict with aquaculture, abalone ranching rights holders is a concern

Page 56

....Continuation

- Promotion of dialogue between ranching rights holders and WCR should be done.
- Establishment of efforts to co-exist with the abalone ranching rights holders in the study area are key
- Recognition of the current investments into the pilot projects, of which some are registered as operation Phakisa Projects, and opportunities presented by this aquaculture investment, to increase jobs, food security and revenue for the country is required
- Socio economic study to address the potential water quality threat to the land based abalone facilities and ranching rights holders should be considered

Page 57

Potential impacts

Specialist cost summary table

Air quality
Noise and vibrations
Archaeology
Estuary management plan
Biodiversity studies
Geohydrological and hydrological investigations
Aquaculture studies
Soil and land capability study
Socio-economic studies

Potential impacts

Please see the link below for the table.

[WKSCE-Impacts \(23 May 2016\)Rev.1.xls.docx](#)

Monitoring and auditing

- Environmental management measures developed for all the identified impacts will be implemented and incorporated into the plant daily activities
- The effectiveness of management measures in mitigating the impacts will be monitored
- Compliance with environmental conditions of approval will be assessed through undertaking of performance audits

Monitoring and auditing

- It will be checked that closure objectives are clearly defined and that monitoring data collected will be meaningful at closure and that management measure are monitored timorously to minimise environmental liabilities at closure

Proposed methodology for monitoring of sandy beaches, rocky shores and sub-tidal reefs

- The monitoring study will consider both physical and biological parameters at reference sites some distance from the mining sites and at sites targeted for cofferdam mining or beach accretion
- It is recommended that the respective sites be selected following a site visit and in close collaboration with both the mine planners and DEA: Oceans & Coast
- Conducted on an annual basis starting a minimum of two years prior to that in which mining commences, and continuing until all impacted communities have recovered to acceptable levels as defined in the monitoring program requirements outlined above

Proposed methodology for monitoring of sandy beaches, rocky shores and sub-tidal reefs

- The intertidal beach and rocky-shore surveys are planned to be undertaken over a spring tide period when the tides are low enough to permit access to the low shore
- Surveys will be considered to be scheduled over spring tides when the height of the low tides above chart datum

Sandy Beach Macrofauna

- Beach faunal community sampling would be carried out using established sandy-beach sampling techniques
- Ten stations would be positioned along each transect line at equal horizontal intervals across the beach face
- All macrofauna retained in the sieves would be preserved in 96% alcohol, and identified to the lowest taxonomic level possible
- A variety of physical parameters will also be measured at each site
- Sediment samples will be collected from Station 1 (the drift line) Station 5 (mid-shore) and Station 10 (spring low water mark)

Sandy Beach Macrofauna

- Graphic methods will be used to obtain the mean particle diameter, sorting and skewness of the sediments
- These physical data will be used to calculate the dimensionless fall velocity or Dean's value, and to rate each site in terms of wave exposure

Rocky Intertidal Macro-benthos

- The macro-benthos of rocky intertidal areas would be sampled in six 0.5-m² quadrats
- The quadrats are divided into a regular 50x50 mm grid pattern giving 171 intersecting points in a 1 x 0.5 m frame
- Data on mean percent cover and abundance for the community as a whole, individual species and trophic groups would then be compared

Page 67

Shallow Sub-tidal Reefs

- Experienced scientific divers, will be used to conduct the underwater benthic assessments
- Dive sites will be selected in three depth zones namely, 1-5 m, 5-10 and 10-15 metres below mean sea level
- At each dive site, two divers will each conduct 5 point counts at 5-m intervals along transects across the seabed
- Within a 2-m diameter circle at each point, the seabed type and structure will be recorded
- To minimise individual dive time at the depths surveyed, and maximise the number and coverage of dives over the survey area, quantitative benthic quadrats will not be attempted

Page 68

Shallow Sub-tidal Reefs

- Various benthic studies have indicated that there is considerable redundancy in the species which characterise the composition of benthic communities.
- This redundancy often allows analysis at higher taxonomic levels, rather than at species level, without weakening the results
- The successful completion of the shallow sub-tidal surveys will be dependent on sea conditions.
- Typically, a wave height of <1.5 m is required for confident and accurate underwater data collection

Page 69

West Coast
Resources



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

WEST COAST RESOURCES – NAMAQUALAND MINES – ENVIRONMENTAL IMPACT ASSESSMENT

*ACCEPTANCE OF THE PROCEEDINGS OF THE MEETING FOR ENVIRONMENTAL IMPACT ASSESSMENT
OVER THE EXISTING MINING RIGHT AREAS FOR KOINGNAAS RIGHT, SAMSON'S BAK RIGHT AND
NAMAQUALAND PROSPECTING RIGHT, NAMAQUALAND MINES, IN NORTHERN CAPE*

Document Name: WNE-PI-Meetings-Proceedings of the Meeting held with Department of

Environmental Affairs (DEA) (Oceans and Coast) on 18 September 2015

Document Status: Rev. 1

Date: 06 October 2015

Myezo Ref Number: WNE 2015/02/AP

Tel: 012 998 7642 | Fax: 012 998 7641 | C: 082 772 2418 | email: babalwa@myezo.co.za

Postnet Suite B165, Private Bag X18, Lynnwood Ridge, 0040, Pretoria, South Africa 1250

645 Jacqueline Drive, Garsfontein, 0081, Pretoria, South Africa



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

012 998 7642, 012 998 7641, 082 772 2418
babalwa@myezo.co.za |

Postnet Suite B165, Private Bag X18, Lynnwood
Ridge, 0040, Pretoria, South Africa

645 Jacqueline Street, Unit 17 Garsfontein Office
Park Garsfontein, Pretoria, 0081

WEST COAST RESOURCES-NAMAQUALAND MINE -ENVIRONMENTAL IMPACT ASSESSMENT

ACCEPTANCE OF THE PROCEEDINGS OF THE MEETING HELD WITH DEPARTMENT OF ENVIRONMENT AFFAIRS FOR WEST COAST'S ENVIRONMENTAL IMPACT ASSESSMENT OVER THE EXISTING MINING RIGHT AREAS FOR KOINGNAAS RIGHT, SAMSON'S BAK RIGHT AND NAMAQUALAND PROSPECTING RIGHT IN NORTHERN CAPE

Document Name: WNE-PI-Meetings-Acceptance of the Proceedings

Myezo Ref No: WNE 2015/02/AP

Dear Sir/Madam

The meeting outlined below, and attended by the attendees listed under Attachment 1 of the record of the proceedings of the same meeting, has reference.

- **Date:** 18 September 2015
- **Time:** 10h40:13h25
- **Venue:** Department of Environmental Affairs (Oceans & Coast), Cape Town

I, the undersigned, hereby acknowledge receipt of the meeting proceedings for the meeting held on 18 September 2015 at the Department of Environmental Affairs (Oceans & Coast), in Cape Town. Furthermore, I accept these proceedings as a true reflection of the issues that were discussed on the aforementioned meeting.

Accepted by:.....

Designation:.....

Date:.....

Signature:.....



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

WEST COAST RESOURCES-NAMAQUALAND-ENVIRONMENTAL IMPACT ASSESSMENT

AGENDA FOR A MEETING WITH DEPARTMENT OF ENVIRONMENTAL AFFAIRS FOR ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CONSTRUCTION OF COFFER DAMS OVER THE EXISTING MINING RIGHTS AREAS, AS PER PRESCRIPTION OF MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT NO. 28 OF 2002) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998)

Document Name: WKSCE-PI-Meetings-Agenda

Converted Mining Right: (SNC) 522 MRC, (SNC)525 MRC

Myezo Ref No: WNE 2015/02/A



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

T 012 998 7642, F 012 998 7641, C 082 772 2418
babalwa@myezo.co.za | 011 011 1111 1111

Posinet Suite B165, Private Bag X18, Lynnwood
Ridge, 0040, Pretoria, South Africa

645 Jacqueline Drive, Garsfontein, 0081
Pretoria, South Africa

WEST COAST RESOURCES-NAMAQUALAND-ENVIRONMENTAL IMPACT ASSESSMENT

AGENDA FOR A MEETING WITH DEPARTMENT OF ENVIRONMENTAL AFFAIRS FOR ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CONSTRUCTION OF COFFER DAMS OVER THE EXISTING MINING RIGHTS AREAS, AS PER PRESCRIPTION OF MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT NO. 28 OF 2002) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998)

Document Name: WKSCE-PI-Meetings-Agenda

Converted Mining Right: (SNC) 522 MRC, (SNC) 525 MRC

Myezo Ref No: WKSCE 2015/02/A

Date: 23 May 2016

Time: 14h00-15h00

Venue: Trans Hex Operations (Pty) Ltd (Boardroom), Cape Town

Agenda:

- 1. Welcome and introduction**
- 2. Background on Environmental Impact Assessment**
- 3. Operational considerations: mining and Abalone ranching activities**
- 4. Issues raised and coexistence suggested solutions**
- 5. Specialist terms of reference and determination of impact and proposed mitigation measures**
- 6. Way forward**
- 7. Closure**

Appendix h-5.3.5: CAD Mapping

Athi Xwayi

From: Athi Xwayi
Sent: 25 February 2016 08:15 AM
To: 'londiwe@cadmapping.co.za'; 'dineo@cadmapping.co.za'
Cc: Caspa Neluheni; Babalwa Fatyi
Subject: Meeting Outcomes for Meeting Discussion between Cad Mapping and Myezo
Attachments: Appendix 1- WKSCE-PI-M-Att Reg with CADmapping- (05-Feb-2016).pdf;
Attachment 1-WKSCE-PI-M-Meeting with CADmapping- (25-Feb-2016)v1.pdf;
Attachment 2- WKSCE-PI-M-Acceptance -(05-Feb-2016).pdf

Good day,

Kindly receive the attached proceedings of the meeting held on 05 February 2016, for your review. The attachments of the email are structured as follows:

- Attachment 1- Meeting outcomes of the meeting held with Myezo on 05 February 2016
 - Appendix 1- Attendance register
- Attachment 2- Acceptance of proceedings

After reading the outcomes, your attention is drawn to attachment 2 (Acceptance of proceedings). May you kindly sign the acceptance of proceedings as proof that you agree that the minutes are a true reflection of the discussions on the aforementioned meeting. Thereafter, may you kindly send us back a signed version of the acceptance letter as per our conversation.

Kindly contact me for any clarity with regards to the attached meeting outcomes .

West Coast
Resources



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

*WEST COAST RESOURCES – KOIGNAAS AND SAMSON'S BAK COMPLEXES- ENVIRONMENTAL IMPACT
ASSESSMENT*

*PROCEEDINGS OF THE DISCUSSION MEETING WITH CAD MAPPING TO DISCUSS ENVIRONMENTAL IMPACT
ASSESSMENT AND REMOTE SENSING*

*Document Name: WKSCE- PI-Meetings - Proceedings of the Meeting held with CAD Mapping on 05 February
2016*

Document Status: Rev. 1

Date: 05 February 2016

Myezo Ref Number: WKSCE 2015/02/M

Tel: 012 998 7642 | Fax: 012 998 7641 | C: 082 772 2418 | email: babalwa@myezo.co.za

Postnet Suite B165, Private Bag X18, Lynnwood Ridge, 0040, Pretoria, South Africa 1250

645 Jacqueline Drive, Garsfontein, 0081, Pretoria, South Africa

Table of Contents

1. Welcome and Introduction	3
2. Attendance and Apologies	3
3. Objectives of the meeting	3
4. Discussion.....	3
5. Meeting Discussions	5
6. Way forward	8
7. Closure	8

List of Tables

Table 5- 1: Meeting discussion	5
---------------------------------------------	----------

Attachments

Attachment 1: Attendance Register



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

012 998 7642, 012 998 7641, 082 772 2418
babalwa@myezo.co.za |

Postnet Suite B165, Private Bag X18, Lynnwood
Ridge, 0040, Pretoria, South Africa

645 Jacqueline Drive, Garfontein, 0081
Pretoria, South Africa

WEST COAST RESOURCES – KOIGNAAS AND SAMSON'S BAK COMPLEXES- ENVIRONMENTAL IMPACT ASSESSMENT

PROCEEDINGS OF THE DISCUSSION MEETING WITH CAD MAPPING TO DISCUSS ENVIRONMENTAL IMPACT ASSESSMENT AND REMOTE SENSING

**Document Name: WKSCE- PI-Meetings - Proceedings of the Meeting held with CAD Mapping on 05
February 2016**

Document Status: Rev. 1

Date: 05 February 2016

Myezo Ref Number: WKSCE 2015/02/M

Date: 05 February 2016

Time: 09h00 -10h00

Venue: Myezo Environmental Management Services Boardroom

1. Welcome and Introduction

Babalwa Fatyi (BF) opened the meeting and welcomed the attendees. The attendees introduced themselves as a team from CAD Mapping, whose details are outlined in the attendance register included as Appendix 1.

2. Attendance and Apologies

It is to be noted that Phumzile Zengele (PZ) apologised for not making it to the meeting. A list of attendees is provided as Attachment 1.

3. Objectives of the meeting

The objectives of the meeting were presented as follows:

- To identify the impact that the mining has on the environment; and
- To identify the role that remote sensing can play in mining.

4. Discussion

Babalwa Fatyi (BF) gave a background on the project and indicated that West Coast Resources (Pty) Ltd (WCR) had existing converted mining rights and prospecting rights over Namaqualand Mines, including the Koingnaas Right (KNR), Samson's Bak Right (SBR) and Namaqualand Prospecting Right (NPR). She indicated that WCR wants to continue with mining on the areas covered by these rights, with immediate target being the Koingnaas and Mitchell's Bay areas by 2015, for the areas that will not trigger new listed activities. However, for the activities that trigger listed activities an Environmental Impact Assessment (EIA) would

need to be undertaken before the commencement of activities. Concerns raised by the attendees in the meeting included the following:

- The role played by the mining company in economic development; and
- The role remote sensing can play in monitoring environmental compliance.

All the concerns raised by the attendees are further discussed in Table 5-1 below.

5. Meeting Discussions

The discussions that were held during the meeting of 05 February 2016 are covered under table, **Table 5-1** below.

Table 5-1: Meeting discussion

Discussion Topic	Key issues raised by CAD Mapping			
	Clarity and recommendation	Response	Action to be taken	Responsible Person if action is required
1. Socio-economic development	What role does the mining company play in economic development?	<p>The establishment of the mining company plays a major role in economic development. Below are a few aspects where the role played by the mining company is most valuable.</p> <ul style="list-style-type: none"> • Job creation; • Infrastructure development; and • Skills development. 	WCR to ensure that the development brings forth a number of jobs, infrastructure development and skills development.	WCR
	Handling of impacts associated with mining sensitive ecological environments during the project	The impacts of the loss of biota as a consequence of mining of Mitchell's Bay and through berm construction and subsequent mining of the impounded area along the adjacent coast were assessed through a desktop study and are considered to be of medium to high	Identified potential impacts that may arise due to the project are to be mitigated accordingly and monitoring of the management of these impacts is to be conducted.	Myezo and WCR

Key issues raised by CAD Mapping				
Discussion Topic	Clarity and recommendation	Response	Action to be taken	Responsible Person if action is required
		intensity in the mining target areas. Impacts are likely to persist over the medium (open coast berms) to long term (Mitchell's Bay) and are thus considered to be of medium to high significance. During the impacts assessment stage, mitigation measures for these impacts will be designed.		
		Provided construction and mining activities are not phased over an extended period, the beaches and rocky shores are not repeatedly disturbed through persistent activities, and suitable post-construction rehabilitation measures are adopted, the impacted communities are likely to recover in the short- to medium-term (i.e. over a period of 2-5 years). Recolonisation of the mined area might be rapid and natural ecological functions and processes might, as such, continue albeit in a modified way.		

Key issues raised by CAD Mapping				
Discussion Topic	Clarity and recommendation	Response	Action to be taken	Responsible Person if action is required
2. Remote Sensing	Role of remote sensing in monitoring environmental compliance	<p>Remote sensing can be used to monitor the condition of environmental features on land in various phases of the project. In addition, it can be used to monitor the status of rehabilitation through capturing images from an aerial view and analyzing the observations/findings. WCR uses orthophoto maps and aerial maps as another method to assist in the monitoring of environmental conditions on the mine.</p> <p>The current method used by WCR to monitor environmental conditions is adequate, as such, WCR is not obliged to use remote sensing techniques. However, if it is found necessary for WCR to use remote sensing techniques, they will decide on which service provider they want to use.</p>	Various methods for monitoring compliance to environmental legal requirements are to be assessed and considered by WCR, and as such WCR is to decide on the most efficient and effective method of monitoring compliance on site.	WCR

6. Way forward

BF stated that, all the concerns raised in the meeting have been recorded in minutes and will be incorporated into the scoping report. Furthermore, these concerns will be assessed and all impacts related to the concerns will be identified. In addition, measures to address the concerns will be proposed and their viability will be assessed further before implementation.

7. Closure

BF closed the meeting and stated that the outcomes of the meeting will be circulated to attendees. The meeting was adjourned.

Attachment 1: Attendance Register



012 998 7642 E 2998 7641 CS2722418
babalwa@myezo.co.za |
Postnet Suite B165 Private Bag X18 Lynnwood
Ridge 0040 Pretoria South Africa
645 Jacqueline Drive Garsfontein 0081
Pretoria South Africa

ADMINISTRATION-ASSOCIATES-CAD MAPPING

ATTENDANCE REGISTER FOR A DISCUSSION MEETING WITH CADMAPPING ABOUT WEST COAST RESOURCES EIA PROCESS

Document Name: AAC-PI-Meetings- Attendance Register for a Discussion Meeting with CAD Mapping

Date: 05 FEBRUARY 2016



Myezo Ref No: AAC2016/02/AR

First Name	Last Name	Company	Position	Tel	Fax	Mobile	E-mail	Address1	Address2	City	Code	Signature
			Myezo Environmental Management Services (Pty) Ltd									
Babalwa	Fatyi	Myezo Environmental Management Services (Pty) Ltd	Director	012 998 7642	012 998 7641	082 772 2418	babalwa@myezo.co.za	Postnet Suite B165, Private Bag X 18, Lynnwood Ridge, 0040	645 Jacqueline Drive, Garsfontein Office Park, Garsfontein	Pretoria	0081	
			CAD Mapping									
Phumzile	Zengele	CAD Mapping		012 430 2281	086 678 7270		phumzile@cadmapping.co.za					
Dineo	Mokgethe	CAD Mapping	Dist. Technol	012 430 2281	072 199 6455		dineo@cadmapping.co.za	125 Skitfeld Bridge Office Park Pretoria 0001		Pretoria	0001	
Zandile	Makgobane	CAD Mapping	Dist. Technol	012 430 2281			zandile@cadmapping.co.za	125 Skitfeld Bridge Office Park Pretoria 0001		Pretoria	0001	



**MYEZO ENVIRONMENTAL
MANAGEMENT SERVICES**
Environmental Stewardship

012 998 7642, 012 998 7641, 082 772 2418
babawa@myezo.co.za |

Postnet Suite B165, Private Bag X18, Lynnwood
Ridge, 0040, Pretoria, South Africa

645 Jacqueline Street, Unit 17 Garsfontein Office
Park, Garsfontein, Pretoria, 0081

WEST COAST RESOURCES – KOIGNAAS AND SAMSON'S BAK COMPLEXES- ENVIRONMENTAL IMPACT ASSESSMENT

**ACCEPTANCE OF PROCEEDINGS OF THE DISCUSSION MEETING WITH CAD MAPPING TO DISCUSS ENVIRONMENTAL
IMPACT ASSESSMENT AND REMOTE SENSING**

**Document Name: WKSCE- PI-Meetings - Acceptance of Proceedings of the Meeting held with CAD Mapping on 05
February 2016**

Document Status: Rev. 1

Date: 05 February 2016

Myezo Ref Number: WKSCE 2015/02/AP

Dear Sir/Madam

The meeting outlined below, and attended by the attendees listed under Attachment 1 of the record of the proceedings of the same meeting, has reference.

- **Date:** 05 February 2016
- **Time:** 09h0:10h00
- **Venue:** Myezo Environmental Management Services, Garsfontein, Pretoria

I, the undersigned, hereby acknowledge receipt of the meeting proceedings for the meeting held on 05 February 2016 at the Myezo Environmental Management Services, Garsfontein, Pretoria. Furthermore, I accept these proceedings as a true reflection of the issues that were discussed on the aforementioned meeting.

Accepted by: Londine Hlatshwayo

Designation: LIDRB PROCESSOR & RESEARCHER

Date: 25/02/2016

Signature: [Signature]



**MYEZO ENVIRONMENTAL
MANAGEMENT SERVICES**
Environmental Stewardship

012 998 7642 / 012 998 7641 / 082 772 2418
babawo@myezo.co.za |

Postnet Suite B165, Private Bag X18, Lynnwood
Ridge, 0040, Pretoria, South Africa

645 Jacqueline Street, Unit 17 Garsfontein Office
Park Garsfontein, Pretoria, 0081

WEST COAST RESOURCES – KOIGNAAS AND SAMSON'S BAK COMPLEXES- ENVIRONMENTAL IMPACT ASSESSMENT

**ACCEPTANCE OF PROCEEDINGS OF THE DISCUSSION MEETING WITH CAD MAPPING TO DISCUSS ENVIRONMENTAL
IMPACT ASSESSMENT AND REMOTE SENSING**

**Document Name: WKSCE- PI-Meetings – Acceptance of Proceedings of the Meeting held with CAD Mapping on 05
February 2016**

Document Status: Rev. 1

Date: 05 February 2016

Myezo Ref Number: WKSCE 2015/02/AP

Dear Sir/Madam

The meeting outlined below, and attended by the attendees listed under Attachment 1 of the record of the proceedings of the same meeting, has reference.

- **Date:** 05 February 2016
- **Time:** 09h0:10h00
- **Venue:** Myezo Environmental Management Services, Garsfontein, Pretoria

I, the undersigned, hereby acknowledge receipt of the meeting proceedings for the meeting held on 05 February 2016 at the Myezo Environmental Management Services, Garsfontein, Pretoria. Furthermore, I accept these proceedings as a true reflection of the issues that were discussed on the aforementioned meeting.

Accepted by: Dineo Makgela

Designation: Researcher + Lecturer professor

Date: 25 February 2016

Signature: [Signature]

Appendix h-5.3.6: DCA



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

WEST COAST RESOURCES-NAMAQUALAND-ENVIRONMENTAL IMPACT ASSESSMENT

AGENDA FOR A MEETING WITH DEPARTMENT OF ENVIRONMENTAL AFFAIRS FOR ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CONSTRUCTION OF COFFER DAMS OVER THE EXISTING MINING RIGHTS AREAS, AS PER PRESCRIPTION OF MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT NO. 28 OF 2002) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998)

Document Name: WKSCE-PI-Meetings-Agenda

Converted Mining Right: (SNC) 522 MRC, (SNC)525 MRC

Myezo Ref No: WNE 2015/02/A



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

P 012 998 7642, F 012 998 7641, E: 082 772 2418
babalwa@myezo.co.za | www.myezo.co.za

Postnet Suite B165, Private Bag X18, Lynnwood
Ridge, 0040, Pretoria, South Africa

645 Jacqueline Drive, Garsfontein, 0081
Pretoria, South Africa

WEST COAST RESOURCES-NAMAQUALAND-ENVIRONMENTAL IMPACT ASSESSMENT

AGENDA FOR A MEETING WITH DEPARTMENT OF ENVIRONMENTAL AFFAIRS FOR ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CONSTRUCTION OF COFFER DAMS OVER THE EXISTING MINING RIGHTS AREAS, AS PER PRESCRIPTION OF MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT NO. 28 OF 2002) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998)

Document Name: WKSCE-PI-Meetings-Agenda

Converted Mining Right: (SNC) 522 MRC, (SNC) 525 MRC

Myezo Ref No: WKSCE 2015/02/A

Date: 23 May 2016

Time: 14h00-15h00

Venue: Trans Hex Operations (Pty) Ltd (Boardroom), Cape Town

Agenda:

- 1. Welcome and introduction**
- 2. Background on Environmental Impact Assessment**
- 3. Operational considerations: mining and Abalone ranching activities**
- 4. Issues raised and coexistence suggested solutions**
- 5. Specialist terms of reference and determination of impact and proposed mitigation measures**
- 6. Way forward**
- 7. Closure**

West Coast Resources



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

*WEST COAST RESOURCES-KOINGNAAS AND SAMSONS BAK COMPLEXES-ENVIRONMENTAL IMPACT
ASSESSMENT*

*NOTES OF A FOLLOW UP STAKEHOLDER MEETING HELD WITH WEST COAST RESOURCES AND DIAMOND
COAST ABALONE COMPANY ABOUT THE SCOPING REPORT AND ENVIRONMENTAL IMPACT ASSESSMENT, AS
WELL AS AN APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN SUPPORT OF A MINING RIGHT HELD
BY WEST COAST RRESOURCES (PTY) LTD, OVER THE KOINGNAAS AND SAMSONS BAK COMPLEXES*

Document Name: WKSCE-PI-Meetings-Meeting Outcomes

Date: 23 May 2016

Myezo Ref No: WKSCE 2015/02/MA

DMR Ref No: NC0043-MR/102 and NC0044-MR/102

Tel: 012 998 7642 | Fax: 012 998 7641 | C: 082 772 2418 | email: babalwa@myezo.co.za

Postnet Suite B165, Private Bag X18, Lynnwood Ridge, 0040, Pretoria, South Africa 1250

645 Jacqueline Drive, Garsfontein, 0081, Pretoria, South Africa

Table of Contents

1. Welcome and Introduction	3
2. Attendance and Apologies.....	3
3. Objectives of the Meeting	3
4. Discussion.....	4
5. Meeting Discussions	7
6. Way forward	16
7. Closure.....	16

List of Tables

Table 5- 1: Meeting discussion.....	5
--------------------------------------------	----------

Attachments

Attachment 1: Attendance Register



MYEZO ENVIRONMENTAL MANAGEMENT SERVICES

Environmental Stewardship

012 998 7642, 012 998 7641, 082 772 2418
babalwa@myezo.co.za |

Postnet Suite B165, Private Bag X18, Lynnwood
Ridge, 0040, Pretoria, South Africa

645 Jacqueline Drive, Garfontein, 0081
Pretoria, South Africa

WEST COAST RESOURCES-KOINGNAAS AND SAMSONS BAK COMPLEXES-ENVIRONMENTAL IMPACT ASSESSMENT

**NOTES OF A FOLLOW UP STAKEHOLDER MEETING HELD WITH WEST COAST RESOURCES AND DIAMOND
COAST ABALONE COMPANY ABOUT THE SCOPING REPORT AND ENVIRONMENTAL IMPACT ASSESSMENT,
AS WELL AS AN APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN SUPPORT OF A MINING RIGHT
HELD BY WEST COAST RESOURCES (PTY) LTD, OVER THE KOINGNAAS AND SAMSONS BAK COMPLEXES**

Document Name: WKSCE-PI-Meetings-Meeting Outcomes

Date: 23 May 2016

Myezo Ref No: WKSCE 2015/02/MA

DMR Ref No: NC0043-MR/102 and NC0044-MR/102

Date: 23 May 2016

Time: 14h00 -15h30

Venue: Trans Hex Operations (Pty) Ltd Boardroom (405 Voortrekker Road, Parow)

1. Welcome and Introduction

Babalwa Fatyi (BF) opened the meeting and welcomed the attendees. The attendees introduced themselves, and their details are outlined in the attendance register, included as Appendix 1.

2. Attendance and Apologies

There was no apology forwarded, and a list of attendees is provided as Attachment 1.

3. Objectives of the meeting

The objectives of the meeting were presented as follows:

- To discuss the way forward regarding issues raised by Diamond Coast Abalone (Pty) Ltd (DCA), during the Scoping Report commenting period and agree on the Terms of Reference (ToR) that were developed to address the issues that were raised by DCA.

4. Background on Environmental Impact Assessment

West Coast Resources (WCR) intends to re-visit and mine certain areas along the Namaqualand Coast. WCR are re-establishing diamond mining operations in the existing mining rights areas, on the Namaqualand coast, previously mined by De Beers and under the existing mining rights of July 2012, i.e. Koingnaas Mining Right (522MRC) and Samsons Bak Mining Right (525MRC). Notice was given in terms of Section 41 (2) (a) (b) (c) (d) (e) and (3) of the 2014 EIA Regulations, that an application for environmental authorisation had been submitted to the Department of Mineral Resources (DMR), in terms of the National Environmental Management ACT, (NEMA) and National Environmental Management: Waste Act: (NEMWA), in respect of listed activities that had been triggered by applications, in terms of the Minerals and Petroleum Resources, Development Act, (MPRDA). This notice period ran from 04 March 2016 to 18 April 2016, and this included a review of the scoping report.

The applications that have been submitted in terms of the MPRDA, are supporting an amendment of the mining right, in terms of Section 102 of MPRDA. WCR will, therefore, commence with mining activities that are currently authorised under the existing mining right, but an environmental impact assessment (EIA) will be undertaken for the activities that are not currently authorised, including beach mining below the low water mark and certain land-based activities. Therefore, the application for environmental authorization is being undertaken for triggered listed activities for the Koingnaas Right and the Samsons Bak Right. Scoping and EIA procedures are being applied to the application. The project reached the final scoping stage and, as such, a final scoping report was submitted to DMR, in Springbok on 29 April 2016.

During the commenting period, the project and the scoping report availability was advertised as follows:

- Newspaper (Namakwalander)
- Site Notices
- Web-link to authorities to notify them about the report availability and allowing them access to review the report
- Notification by email to other stakeholders to inform them where they could review the report
- Hard copy of the report was availed at:
 - Springbok Library
 - West Cast Resources Offices
 - Koingnaas Mine Office

5. Discussions

Background on the issues raised

The issues that were raised by stakeholders were collated to be addressed in the succeeding EIA stage. DCA were amongst the stakeholders who raised issues to be addressed.

DCA is the rights holder for the Northern Cape Zone 4 abalone ranching concession area and of the 16 potential abalone seeding sites identified by DCA in the NC Zone 4 concession area, 13 are adjacent to and/or overlaps the West Coast Resources (Pty) Ltd (WCR) diamond mining concession area.

According to the issues raised by DCA, it was highlighted that it was believed by the DCA that it was unlikely that the DCA abalone ranching initiative will be viable if DCA is excluded from the majority of the suitable seeding sites in NC Zone 4 for significant periods of time. The DCA abalone ranching initiative would also not be viable if there was significant habitat destruction and/or if seeded abalone was destroyed through mining operations.

With respect to the issues that the DCA and abalone specific issues raised by Department of Agriculture, Forestry and Fisheries (DAFF), the aspects pertaining to the matters outlined below were identified as key.

Interaction with other users or future use scenarios

- Potential conflict with abalone ranching rights holders regarding water quality and habitat loss, particularly those companies that have already started seeding juveniles;
- Increased turbidity near mining site(s) may compromise water quality at the seawater intakes to land-based abalone farms.

Water Quality

- The impacts of suspended sediment plumes and elevated turbidity as a result of mining operations need to be assessed;
- Increased turbidity near mining site(s) may impact filter feeders;

Subsequent to the receipt of these issues, a response was provided to DCA that they have been noted and will be addressed in the succeeding EIA stage. As such, the ToR were drawn up to ensure that the issues were investigated further to determine the potential impacts. The DCA had been given an opportunity to comment on the ToR and the issues below were suggested for incorporation into the ToR as part of that review process.

- A legal review of applicable legislation, with a specific focus on user and access rights;
- A review of suggested access arrangements;
- A cost comparison of seeding abalone from land vs boat based seeding;

- Identification of alternative areas for ranching in the Northern Cape Province and an assessment of the likelihood that these areas could be zoned for abalone ranching.

EIA process

As part of the meeting discussion it was prudent to understand that the meeting was part of the EIA process. This was also highlighted by Babalwa Fatyi (BF). It was a follow-up to discuss the issues that were raised by DCA and finding a way in which they could be addressed in the succeeding EIA stage. This would be achieved by investigating the matters further through specialist studies. The ToR for which have already been drafted and given to DCA for comments. This is done to ensure that DCA is comfortable with the questions that the specialist is trying to answer are indeed pertaining to the concerns they raised and seek to solicit solution in terms of how the identified impacts can be addressed.

The specialist would then use the suggested access control scenarios to predict the impacts. This would be parallel process to the EIA, which would focus on operational matters and control thereof.

However, there are also other dynamics to the matter of controlled access, which may need to be discussed separately from the EIA process, with WCR, who is handling these matters from a risk perspective.

There is also another aspect, which is engrained to this issue of controlled access and the co-existence of the two mining and ranching rights and this pertains to the matter of regulatory framework, which is being handled by the DAFF and DMR. As such, the legislative requirements and intended objectives of the applicable laws and guidelines would need to be looked at, on a more strategic level, than the EIA process. Inherent to these conditions, would be the Operation Phakisa operational controls since both projects meet the Operation Phakisa objectives and the General Guidelines for Marine Ranching and Stock Enhancement in South Africa, which was gazetted on 20 August 2010.

DCA commenced the pilot scale seeding of selected sites with different size cohorts of the abalone species in May 2014, subsequent to attaining of the associated rights from DAFF. This is one of the seven rights to engage in abalone ranching or stock enhancement pilot projects to test technical, financial and environmental viability of abalone ranching.

All the concerns raised by the attendees are further discussed in Table 5-1 below.

6. Meeting Discussions

The discussions that were held during the meeting of 23 May 2016 are covered under table, Table 6-1 below.

Table 6-1: Meeting discussion

Discussion Topic	Key issues raised by CAD Mapping			Responsible Person if action is required
	Concerns/Discussion	Responding/supporting statements	Action to be taken	
<ul style="list-style-type: none"> Security of Tenure 	<p>Gert Le Roux (GL) stated that DCA needs security of tenure because the funding body wants to see this. DCA requests at least five years from the time they seed to harvesting for the market, which is Far east-Singapore, Japan etc.</p> <p>They had seeded on the five areas to the north of Koinaas and are concerned about the impact of mining on those areas. However, all the seeding operations are currently halted. At this stage there is no guarantee that they will have access to the other areas they have targeted. The aquaculture activity will require at least areas that are about 10-20 m deep and if there are these areas that WCR will not be using, then DCA, can use</p>		<ul style="list-style-type: none"> WCR to refer to the sites provided in the DCA, ranching report (NC Zone 4 Abalone Ranching Area). 	

Key issues raised by CAD Mapping				
Discussion Topic	Concerns/Discussion	Responding/supporting statements	Action to be taken	Responsible Person if action is required
<ul style="list-style-type: none"> Operational Considerations 	<p>Not disregarding safety and mining, but the access agreement and negotiations, thereof, should be driven by the fact that other parties also have rights and not focus only safety considerations (GL).</p>	<p>Vincent Madlela (VM) alluded to the fact that there were no activities in these areas at the time when the agreement was reached for access with DCA. Currently, there are safety considerations, as well, where by it would not be feasible to have uncontrolled movement while the mining activities are on-going.</p> <p>Nevertheless, it is acknowledged that The Mine Health and Safety issues can be addressed in the access agreement, if the negotiations have progressed to that level, since the EIA process would not solve such arrangements.</p> <p>VM also sought clarification on the status of the abalone project per Operation Phakisa requirements.</p> <p>GL clarified that in 2014, this project was included in a list of priority</p>	<p>Operational discussions will be done in-house and GL will be informed of the discussion outcomes and opportunities for setting - up future specific operational meetings to address solely access.</p>	<p>WCR</p>

Key issues raised by CAD Mapping				
Discussion Topic	Concerns/Discussion	Responding/supporting statements	Action to be taken	Responsible Person if action is required
<ul style="list-style-type: none"> Communication channels 	<p>From the DCA perspective, the discussions for access are not on-going, because the communication was broken down. Stan Turketti (ST), had via email, closed the aspect of discussion and highlighted the fact that the DCA team had now selected alternative channels of addressing the matter. The regulatory authority channel was deemed as a channel that was used to deal with negotiations and as such the doors were closed by WRC.</p> <p>GL believed that the negotiations that were initially opened with WCR should still be continued and not wait for the specialist evaluations.</p>	<p>aquaculture projects identified as part Operation Phakisa initiative.</p> <p>VM stated that ST is still dealing with the operational matters from a risk perspective. From previous background, DCA was requested to come back after two years for access considerations on the areas to the south (Mitchell's Bay South) because of current mining activities, which would make the compliance with security and safety obligations difficult, if third parties were allowed to work at the same time. The access to the North of Koinaas was never denied, but is subject to security control measures such as applying for security clearances.</p>	<ul style="list-style-type: none"> Vincent to feedback to ST and see if meetings to discuss the operational access matters can be scheduled. WCR and DCA to find opportunities to synchronise the mine plan and the aquaculture activities. Aquaculture team needs to present their plan and schedule on the mine targeted area. Legal obligation of the parties for compliance to be taken into account if agreements are to be drawn. 	<p>Myezo, WCR and DCA</p>

Key issues raised by CAD Mapping				
Discussion Topic	Concerns/Discussion	Responding/supporting statements	Action to be taken	Responsible Person if action is required
<ul style="list-style-type: none"> Impact on water quality and turbidity concerns and EIA process undertaken. 	<p>According to GL, there are no EIA authorization requirements for these abalone ranching activities, except for the land operations in Hondeklip Bay, for which an environmental study was done. The operations are all land based. There are no sea water pumps traversing the WCR mining sites. The water pumping area is all based in Hondeklip Bay. The EIA was only needed for the land based activities.</p> <p>The conditions of the rights are that monitoring must be undertaken. Aquatic Ecosystem Services is currently doing monitoring (Russel Trommers). There are control sites in between the zones, those that will never be seeded. An environmental risk assessment and environmental management programme was undertaken by Ecosense Environmental Consultants. A marine</p>	<p>It would be appreciated if the environmental studies shared with WCR so that they act from an informed perspective on the overall issues and foundation for the issues raised and how the agreements could be drawn if negotiations in this regard are successful.</p>	<ul style="list-style-type: none"> Address the concern on turbidity in the EIA report. Share any environment studies that were and are being done for AbaloneDCA with WCR to ensure that the specialist study is objective and the co-existence opportunities are clearly understood. Various methods for monitoring compliance to environmental legal requirements are to be assessed and considered by WCR, and as such WCR is to decide on the most efficient and effective method of 	<p>Myezo and WCR DCA</p>