EXPLORATION DRILLING IN THE ORANGE BASIN DEEP WATER LICENSE AREA OFF THE WEST COAST OF SOUTH AFRICA

COMMENTS RECEIVED FROM INTERESTED AND AFFECTED PARTIES

I&AP REGISTRATION AND RESPONSE FORMS

Yes No Name: Francine Disclemann Designation: Mis Organisation: Mis Postal address: PO Box 23310 Elucen 7735 Email address: Telephone number: 216715315 Fax number: Do you or your organisation have any issues or concerns regarding the Orange Basin Deep Water License Area? Yes No If yes, please provide details below (or use extra pages if necessary for Box bits on Iccal fishing for Marico all spills for Marico all spi	ornt Cape Tewn francine bek@gnaik
Yes V No Name: Francine Bischmann Designation: Mis Organisation: Mis Postal address: PO Box 23310 Clure or 7735 Email address: Telephone number: 216715315 Fax number: Do you or your organisation have any issues or concerns regarding the Orange Basin Deep Water License Area? Yes No If yes, please provide details below (or use extra pages if necessary Organists on local fishing Dimparts on local fishing Bright on local fishing She Gulf of Mission on local fishing	ent Cape Town francinebt Kegnaile re proposed well drilling programme in
Name: Francine Dieckmann Designation: Ms Organisation: Product Postal address: Por Box 23310 cluren 7735 Email address; Telephone number: 0216715315 Fax number: Do you or your organisation have any issues or concerns regarding the Orange Basin Deep Water License Area? Yes No If yes, please provide details below (or use extra pages if necessary Provide Spills from duiling Dimpacts on local fishing Bringacts on local fishing Bringacts on local fishing Salety and re-concerned	omt Cape Tewin francinebtk@gmaik ne proposed well drilling programme in
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7735 Email address: Tolephone number: 0216715315 Fax number: Do you or your organisation have any issues or concerns regarding the Orange Basin Deep Water License Area? Yes No Yes No If yes, please provide details below (or use extra pages if necessary 0 Possible spills from duiling 2 Impacts on local fishiles Dimpacts Iccal fishiles Br Gulf of mence form Salety and re-occurrence	francine bt k@gmails
Telephone number: DRIGHISSIN Fax number: Do you or your organisation have any issues or concerns regarding the Orange Basin Deep Water License Area? Yes No If yes, please provide details below (or use extra pages if necessary D Possible Spills from during D Impacts on recal fishing D Impacts on recal fishing D BP Gulf of Therico Cill Spill Salety and re-occurrence	e proposed well drilling programme in
Do you or your organisation have any issues or concerns regarding the Orange Basin Deep Water License Area? Yes No If yes, please provide details below (or use extra pages if necessary O Possible spills from doubles D Impacts on local fishing D Impacts on local fishing BP Gulf of munico oil spill Salety and re-occurrence	e proposed well drilling programme in
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PROPOSED EXPLORATION WELL DRILLING PROGRAMME IN THE ORANGE BASIN DEEP WATER LICENCE AREA OFF THE WEST COAST OF SOUTH AFRICA

INTERESTED AND AFFECTED PARTY (I&AP) REGISTRATION AND RESPONSE FORM

Would you or your organisation like to become a registered I&AP and continue to receive information on the proposed project? Yes 1 No Name: GREES MORSHOLL Designation: Resic CONTERN MANAGER Organisation: MANYEST GARAGETTER (Pry) 500 SEA Postal address: P. = Bur 52 Email address: grag maisrala west. co za SACOHNHA Telephone number: 122 7014166 Fax number: 021 7144239 Do you or your organisation have any issues or concerns regarding the proposed well drilling programme in the Orange Basin Deep Water License Area? Yes No If yes, please provide details below (or use extra pages if necessary): drill isont beyond our fishing area desth speinting. Please forward to: Registration and Response NMA Effective Social Strategists (Pty) Ltd Forms must reach NMA Attention: Mfowabo Maphosa Effective Social Strategists PO BOX 32097, BRAAMFONTEIN, 2017 EFFECTIVE SOCIAL no later than STRATEGISTS. Tel: 011 447 9737 Fax: 086 601 0381 Monday 2 December 2013 E-mail: mfowabom@nma.org.za Development Through Participation

<u>EMAILS</u>

From:	Mfowabo Maphosa
Sent:	31 October 2013 02:30 PM
10: Subject:	Alet Fabricius' RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the
oubjeot.	West Coast of South Africa
Attachments:	~WRD000.jpg; image001.jpg; image002.jpg
Dear Alet	
have added you to t	he I&AP database.
Best Regards	
Mfowabo	
From: Alet Fabricius	[mailto:Alet.Fabricius@bidports.co.za]
Sent: 31 October 201	3 08:01 AM
To: Mtowabo Maphos	a Junior tion Duilling by Chall in the Origina Paris Dean Without Genera Area off the Wort Court of
South Africa	xploradon Drining by Shen in the Orange Basin Deep water License Area on the West Coast of
Good day,	
Please add me to you	r list of I&APs for this project. My details are in my e-mail signature.
Kind regards,	
Alet	
All business by Bidfreigh of which is available on www.bidports.co.za	n! Port Operations is undertaken strictly in accordance with its Standard Trading Terms and Conditions, a copy request, or on the Company's website. For e-mail disclaimer, a full list of Directors and the STC, see
Tel 022 714 0212) Fax	086 515 3816 Cell 083 659 1850 Alet.Fabricius@bidports.co.za
From: Wikus van der Sent: 31 October 201	Merwe 13 07:28 AM
Subject: FW: EIA - E South Africa	exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of

All business by Bidfreight Port Operations is undertaken strictly in accordance with its Standard Trading Terms and Conditions, a copy of which is available on request, or on the Company's website. For e-mail disclaimer, a full list of Directors and the STC, see www.bidports.co.za

From: Sent:	Anschen Friedrichs [afriedrichs@sunbirdenergy.com] 04 November 2013 12:00 PM				
To: Subject:	Mfowabo Maphosa RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa				
Dear Mfowabo,					
Thank you for the o	confirmation.				
Kind regards,					
Anschen Friedrichs Public Officer	voschen Friedrichs Public Officer				
Sur	NBIRD ENERGY				
From: Mfowabo M Sent: 04 Novembe To: Anschen Friedr Subject: RE: EIA Africa	aphosa [mailto:MfowaboM@nma.org.za] # 2013 11:39 AM ichs • Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South				

Dear Anschen

I hereby confirm receipt of your email.

Best Regards Mfowabo

From: Anschen Friedrichs [mailto:afriedrichs@sunbirdenergy.com] Sent: 01 November 2013 09:31 AM To: Mfowabo Maphosa Subject: RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

Dear Mfowabo,

Thank you for your email and confirming that we have been identified as an I&AP.

Please note that Sunbird Energy has been confirmed as the Operator (76%) of Block 2A (Ibhubesi Gasfield) as per the Section 11 approval received during October 2013.

My Forest address will remain active for a while but could you please amend your records to reflect my Sunbird details for future communications.

Please confirm receipt of my email.

From: Sent: To: Subject: cindy.ross@za.atlascopco.com 12 November 2013 11:15 AM Mfowabo Maphosa Re: Exploration Drilling by Shell in the Orange Basin

Dear Mfowabo,

Thank you for this information. Much appreciated.

Cindy Ross External Sales Consultant

From: "Mfowabo Maphosa" [MfowaboM@nma.org.za] Sent: 11/12/2013 10:30 AM ZE2 To: Cindy Ross Subject: RE: Exploration Drilling by Shell in the Orange Basin

Dear Cindy

The information that is available on the project at the moment is the Background Information Document which I have attached.

We have forwarded your contact details to Shell so that somebody can contact you in this regard.

Best Regards Mfowabo

From: cindy.ross@za.atlascopco.com [mailto:cindy.ross@za.atlascopco.com] Sent: 04 November 2013 10:01 AM To: Mfowabo Maphosa Subject: Fw: Exploration Drilling by Shell in the Orange Basin

Good day Sir,

Thank you for below email. Are you able to provide me with more information on this project, and in particular who would be the best contact person to speak to, to get involved in the project?

Thanking you in advance.

Best Regards,

Cindy Ross Sales Consultant

From:	Lesley-Anne Martin [les@toprope.co.za]
Sent:	05 November 2013 08:46 AM
To:	Mfowabo Maphosa
Subject:	RE: exploration drilling in the Orange Basin Deep Water Licence Area off the West Coast of South Africa
Attachments:	image001.jpg

Thank you, much appreciated.

Kind regards,



From: Mfowabo Maphosa [mailto:MfowaboM@nma.org.za] Sent: 05 November 2013 08:30 AM To: Lesley-Anne Martin Subject: RE: exploration drilling in the Orange Basin Deep Water Licence Area off the West Coast of South Africa

Good morning

I have registered Mr Bottomley as an I&AP and he will be included in all future notifications.

Best Regards Mfowabo

From: Lesley-Anne Martin [<u>mailto:les@toprope.co.za</u>] Sent: 04 November 2013 05:15 PM To: Mfowabo Maphosa Subject: exploration drilling in the Orange Basin Deep Water Licence Area off the West Coast of South Africa

Good Day

Our Managing Director, Mr Daniel Bottomley would like to register as an Interested Party for the above.

Please include our company in all future notifications. Our Mr Bottomley will also be attending on Monday 11th and Tuesday 12th November.

Subject:

FW: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

From: Nomi Muthialu Sent: 14 November 2013 11:59 AM To: Julian Drew: Mfowabo Maphosa Subject: FW: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

From: Jeremy Blood - CCA Environmental [mailto:jeremy@ccaenvironmental.co.za] Sent: 12 November 2013 10:00 To: Nomi Muthialu; Julian Drew Cc: Nigel.Rossouw@shell.com; jonathan@ccaenvironmental.co.za Subject: FW: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

Hi Nomi & Julian

Herewith comments from DAFF (from Deon Durholtz) for your records and inclusion into the Issues & Responses Trail.

Regards Jeremy

From: DeonD [mailto:DeonD@daff.gov.za] Sent: 11 November 2013 12:30 PM To: Jeremy Blood Cc: Wendy West; Sven Kerwath; Carl Van Der Lingen Subject: RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

Hi Jeremy,

Below is a summary of the comments from Wendy West, the DAFF scientist working on the tuna pole and pelagic longline sectors – I have cc'd her on this email for further communication purposes (and also Sven Kerwath, the senior scientist dealing with those and other sectors and Carl van der Lingen, the chair of the DAFF EAF Scientific Working Group).

[Wendy, Sven and Carl: Jeremy works for CCA Environmental, the company responsible for managing and undertaking the Basic Assessment and EMPr Addendum process. Any further comments on the project can be addressed to Jeremy. I will send you all the background information document in the next email.]

Cheers

D

Summary of Wendy's comments:

Industry representatives: Tuna pole: Fresh Tuna Exporters Association (FTEA) – Steve Cameron-Dow, <u>stevecd@rsaweb.co.za</u>. South African Tuna Association (SATA)- Clyde Bodenham, <u>sata@mweb.co.za</u>. Tuna longline: South African Tuna Longline Association (SATLA)- Don Lucas, <u>don@comfish.co.za</u>.

The proposed exploration well falls on the continental shelf edge region where the, mainly, swordfish longline vessels do operate. Most of the tuna pole operators are closer inshore and south at the Cape Canyon, though a few vessels operate in Namibia's waters at Vema Seamount and are encouraged to fish up the West Coast. Tuna pole may argue that the oil exploration will affect the migration patterns of albacore as they travel up the West coast on their way to Namibia.

What is the time frame for the exploration? If it is over the tuna pole season (Oct - May) that may be a problem. I would have to check the recent activity of the swordfish vessels, but they have fished in that region in the past.

Is their proposed region not Child's Bank? Swordfish are known to head to feeding grounds such as seamounts and banks and that may be an issue.

My above thoughts need to be backed up by previous studies that highlight impacts of oil drilling on migration oatterns, but those are my initial thoughts.

From:	Mfowabo Maphosa	
Sent:	31 October 2013 03:07 PM Elmien De Bruyn'	
To:		
Subject:	RE: EIA - Exploration Uniling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa	
Attachments:	image001.png; image002.jpg	
Good Day Elmien		
I have registered Du	ferco Steel Processing on the 18 AP database.	
Regards		
Mfowabo		
Subject: RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa Good day		
I would hereby like to register Duferco Steel Processing (Pty) Ltd as an Interested and Affected Party to this specific EIA		
Contact persons at our side are:		
Elmien de Bruyn (elr	nien.debruyn@dsp.co.za) – Environmental Co-ordinator	
Ilze Venter (ilze.vent	er@dsp.co.za) - Cost and Compliance Manager	
Kobus van Rensburg	(kobus.vanrensburg@dsp.co.za) - Production Manager	
Jan Hattingh (<u>jan.ha</u>	ttingh@dsp.co.za) - Procurement Manager	
Regards		
ELMIEN DE BRUYN		

Environmental Co-Ordinator

Duferco

Duferco Steel Processing Tel: +27 22 709 7127 Cell: +27 83 308 5938 Fax: +27 22 709 7342

FIOIN.	Mfowabo Maphosa		
Sent:	05 November 2013 09:53 AM	N	
To:	"Esther Kluge Leapfrog"		
Subject:	RE: EIA - Exploration Drilling West Coast of South Africa	g by Shell in the Orange Basin Deep V	Vater License Area off the
Attachments:	image001.gif; image002.jpg		
Good morning Esthe	BT .		
Thank you for confi	ming that two people from your offi	ce will attend the POD.	
Best Regards			
Mfowabo			
From: Esther Kluge	Leapfrog [mailto:esther.kluge@lea	pfrog.co.za]	
Sent: 31 October 2	013 12:15 PM		
To: Mfowabo Maph)Sa		
Subject: RE: EIA -	Exploration Drilling by Shell in the Or	ange Basin Deep Water License Area o	off the West Coast of Sou
Africa			
Good day Mfowabo			
Two people from ou	r office will attend the POD cession	at Saldanha Protea Hotel on 12 Novem	iber.
Regards			
Esther			
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	2783 450 45947 1722 772 0501 1722 772 2239 the: Ruge@leapfrog.co.za	leapfrog	Comparison Compar

Mfowabo Maphosa

From: Sent: To: Subject: Mfowabo Maphosa 01 November 2013 12:22 PM 'Francine Becker' RE: Shell Orange Basin

Dear Francine

I have registered you as an I&AP.

Best Regards Mfowabo

From: Francine Becker [mailto:francinebkk@gmail.com] Sent: 01 November 2013 12:00 PM To: Mfowabo Maphosa Subject: Shell Orange Basin

Dear Sir/Madam I wish to register as an interested and affected party and participate in the process. Regards Francine Dieckmann

i i vin.	Mfowabo Maphosa	
Sent:	05 November 2013 08:52 AM	
To:	'Jeremy Marillier'	
Subject:	RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa	
Attachments: image001.jpg		
Good morning Jerem	ry	
I have registered Fish	ISA as an I&AP.	
Best Regards		
Mfowabo		
From: Jeremy Marilli	er [mailto:jeremy@fishsa.org]	
Sent: 04 November .	2013 03:16 PM	
To: Mfowabo Mapho:	Sa Lucil.	
Subject: FW: EIA - B	Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of	
South Africa	and the second	
Hi there		
I represent FishSA th	e overarching umbrella industrial body for the fishing industry. We would like to register as an	
affected party and at	tend the Cape Town meeting.	
Kind regards		
Jeremy Marillier		
Executive Director: Fi	ishSA	
(021) 425 2727		
079 4525349		
From: South African	Tuna Association [mailto:sata@mweb.co.za]	
Sent: 04 November :	2013 02:19 PM	
To: Jeremy Marillier		
Subject: FW: EIA - B	Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of	
South Africa		
Hi Jeremy		
Are we on this?		

Sent: 30 October 2013 04:37 PM To: Clyde Bodenham Subject: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

Dear Sir / Madam

From:	Mfowabo Maphosa
Sent:	01 November 2013 11:09 AM
Subject:	RE: Orange Basin Deen Water (DEA Ref No. 14/12/16/3/3/1/1063
oubject.	re. charge bean beep mater (ber renner her hand her sin heres
Dear Judith	
I have added ME	K Drilling as an I&AP,
Best Regards	
Mfowabo	
Original M	essage
From: MEK Drill	ing BK [mailto:admin@mekdrilling.co.za]
To: Mfowaho Man	er 2015 10:40 AM
Subject: Orange	Basin Deep Water (DEA Ref No. 14/12/16/3/3/1/1063
Importance: Hig	h
Dear Sir	
We refer to you	r advert in our local newspaper " Ons Kontrei", dated November 1, 2013.
Please, registe	r our company as an interested party in this project.
Attached are ou and would be gr	r business profile which indicates, that we are a successful drilling company ateful if you register us in your database.
Regards	
Judith Vermeule	n
Secretary	
MEK Drilling CC	
TEL: (027) 219	1126
FAX: (027) 219	1759
E-Mail:admin@me	KGriiing.co.za

From: Sent: To: Subject: Mfowabo Maphosa D5 November 2013 11:19 AM 'Noleen Green' RE: Namibian Hake Association

Dear Noleen,

Thank you for your email. I have added the Namibian Hake Association and the Confederation of Namibian Fishing Association as I&APs.

Best Regards Mfowabo

From: Noleen Green [mailto:noleen.green@gmail.com] Sent: 05 November 2013 11:01 AM To: Mfowabo Maphosa Subject: Re: Namibian Hake Association

Dear Mfowabo.

Thank you for your email and my apology for the late response!

Contact details for the Chairman of the Namibian Hake Association:

Mr Matti Annıkwa Mobile: +264 811293461 Office: +264 64 205595 email: empire@namibnet.com

Mr Amukwa is also "acting" chairman for the Confederation of Namibian Fishing Associations

Regards, Noleen Mfowabo Maphosa Mfowabo Maphosa From: Sent: 12 November 2013 10:39 AM 'P Esposito' To: Nomi Muthialu; Julian Drew Cc: Subject: RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa Attachments: image001.jpg Dear Mr Esposito Thank you for your email. We will keep you informed throughout the study and, as you are now included on the project database, Shell will continue to inform you of any new information should the proposed exploration drilling receive approval and proceed into implementation. **Best Regards** Mfowabo Maphosa From: P Esposito [mailto:pe@imdhgroup.com] Sent: 01 November 2013 11:31 AM To: Mfowabo Maphosa Subject: RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa Dear Mfowabo Maphosa, I am replying to your email below on behalf of IMD SA. Thank you for providing us with the background information concerning Shell's exploration drilling. We operate, directly and through other companies of our Group (FYI, please refer to imdhgroup.com) survey, exploration and mining vessels in contiguous area. Therefore, we kindly ask you to keep us informed of any

exploration and mining vessels in contiguous area. Therefore, we kindly ask you to keep us informed of any development of your activities in terms e.g. of identification of the marine location and timing so that we will be able to coordinate our reciprocal transit on overlapping areas in order to ensure the highest level of safety and avoidance of any adverse impact whatsoever on our reciprocal operations.

We look forward to hearing from you in due course.

Best Regards, Paolo Esposito

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From:	Richard Montjoie [rmontjoie@umbono.co.za]
Sent:	D1 November 2013 12:46 PM
To:	Mfowabo Maphosa
Cc:	afriedrichs@sunbirdenergy.com.au
Subject:	RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the
	West Coast of South Africa

Thank you kindly sir!

UMBONO CAPITAL

Richard Montjoie | Geologist Office: +27 11 484 5005 Fax: +27 11 484 5004 This email transmission is strictly confidential and is intended solely for the person or organisation to whom it is addressed. It may contain privileged and confidential information and if you are not the intended recipient you may not copy or distribute if or take action in reliance on it. Any unauthorised interception of this email is illegal. Save for bona fide company matters the Umbono Group of Companies do not accept any responsibility for the opinions expressed in this email. More information at www.umbono.com

From: Mfowabo Maphosa [mailto:MfowaboM@nma.org.za] Sent: 01 November 2013 11:04 AM To: Richard Montjoie Cc: afriedrichs@sunbirdenergy.com.au Subject: RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

Dear Richard

I have added you to the I&APs database.

Best Regards Mfowabo

From: Richard Montjoie [mailto:rmontjoie@umbono.co.za] Sent: 01 November 2013 10:46 AM To: Mfowabo Maphosa Cc: afriedrichs@sunbirdenergy.com.au Subject: FW: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

Dear Mfowabo

Please could you register myself as an I&AP for this project, I am assisting Sunbird with the EIA process on the Ibhubesi Gas Project. 1

From:	Shirlene Fransman [shirlenef@cederbergraad.co.za]	
Sent:	06 November 2013 08:46 AM	
Subject:	RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off th West Coast of South Africa	
More		
Baie dankie		
Shirlene Fransman		
Snr Klerk debiteure:	Inkomste	
Streek kantoor – La	mbertsbaai	
el: 027 432 1112		
Fax: 056 301 7603		
From: Mfowabo Ma Sent: 05 Novembe	phosa [mailto:MfowaboM@nma.org.za] r 2013 05:25 PM	
To: Shirlene Fransn	lan	
Subject: RE: EIA - Africa	Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South	
Dear Hilda		
Please find enclose	d BID in Afrikaans.	
Best Regards		
Mfowabo		

Sent: 05 November 2013 04:30 PM To: Mfowabo Maphosa Subject: RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa

Baie dankie

Kan u dit in Afrikaans ook epos.

Baie dankie

Hilda E Job

Tel: 027 432 1112 Fax: 086 501 7609

From:	Mfowabo Maphosa
Sent:	31 October 2013 12:37 PM
To:	'steve@provisi.co.za'
Subject:	RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa
Dear Mr Meyer	
have removed you	from the I&AP database.
Regards Mfowabo	
Hi Mfowabo	
Please remove me f	from the list of interest parties. I do not wish to receive any further correspondence.
Kinds regards	
Kinds regards Steve Meyer	

From:	WESSA Northern Cape [wessanc@yahoo.com]
Sent:	31 October 2013 08:46 AM
To:	Mfowabo Maphosa
Cc:	Helena Atkinson
Subject:	Re: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South Africa
Attachments:	Mfowabo

TO WHOM IT MAY CONCERN

Unlike most other Regions, the Northem Cape Region of WESSA has no staff and is run by a group of volunteers. We currently have nobody on our Committee to handle the Conservation portfolio, and pressure of work means that <u>we are</u> not able to affend meetings or participate in Environmental Impact Assessments at this time. Please note that a lack of response does not mean that we condone this project; it simply means that we do not have the capacity to deal with these matters.

In the interest of saving paper, trees and costs, please do not post any hardcopies or discs to us, unless specifically requested. We cannot currently deal with these and they will be destroyed.

Our fax 053 842 1433 belongs to the McGregor Museum, and should only be used under exceptional circumstances, and for single pages only. This is a communal machine, so please mark all documents clearly WESSA', or direct them to me by name. We prefer to communicate by e-mail.

This project also falls outside the Northern Cape Province.

Kindly contact the Western Cape Region of WESSA. Consult our website <u>www.wessa.org.za</u> or contact Helena Atkinson, the Regional Manager at <u>ecoschoolswc@wessa.co.za</u>

Please do not hesitate to contact me should you require any further information.

Suzanne Erasmus Chairperson WESSA (Northern Cape Region) PO Box 316 8300 Kimberley Tel 053 839 2717 w Fax 053 842 1433 w Cell 082 849 7655 wessance 249 7655 wessance 249 7655

From: Sent: To: Subject: Mfowabo Maphosa 25 November 2013 03:02 PM Trevor Nell' RE: Exploration Drilling by Shell in the Orange Basin

Dear Mr Nell

Many thanks for your email.

When you ask is it still possible to bid on this project what are you referring to?

Shell has an exploration right for the Orange Basin Deep Water Licence Area and is currently applying for environmental authorisation to undertake exploration drilling in this area. Should Shell obtain the necessary authorisation it will undertake the exploration drilling using its own drilling ship or semi-submersible drilling rig.

What component of the project do you wish to bid for?

Best Regards Mfowabo

From: Trevor Nell [mailto:Trevor.Nell@moore-eme.com] Sent: 20 November 2013 05:50 PM To: Mfowabo Maphosa Subject: Exploration Drilling by Shell in the Orange Basin

Dear Mfowabo,

Is it still possible to bid on this project?

Kind regards,

Trevor Nell

Matrikon Moore – Europe and Middle East

Tel: +27 (0) 11 466 1673/9 Fax: +27 (0) 11 466 1618 Cell: +44 (0) 777 265 1605 www.matrikon.co.za / www.moore.co.za

From:	Mfowabo Maphosa						
Sent:	12 November 2013 11:59 AM						
Subject:	trevongethombopetroleum.com' RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the						
0.0	West Coast of South Africa						
Attachments:	image001.jpg						
Dear Mr Ridley							
Thank you for the en	nail.						
We will keep you inf	ormed of developments concerning this project.						
Best Regards							
Mfowabo							
From: Trevor Ridley Sent: 31 October 20 To: Mfowabo Mapho Subject: RE: EIA - 1 Africa	[mailto:trevor@thombopetroleum.com] 13 09:30 AM sa Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the West Coast of South						
Dear Mfowabo,							
Thank you for this no	stification, I would indeed like to remain informed of developments concerning this project.						
Kind regards							
Trevor Ridley							
000 m ()	=)						

Managing Director Thombo Petroleum Ltd.

```
Mfowabo Maphosa
```

From: Sent:	Mfowabo Maphosa 31 October 2013 01:31 PM
To: Subject:	"Wilna Oppel" RE: EIA - Exploration Drilling by Shell in the Orange Basin Deep Water License Area off the
Attachments:	West Coast of South Africa Shell OB BID Afrikaans 25 Oct 2013 FINAL.pdf
Dear Wilna	
Please find attache	d the BID in Afrikaans.
Best Regards Mfowabo	
Original Messa From: Wilna Oppel [Sent: 31 October 20 To: Mfowabo Maphosa	ge mailto:woppel.dtec@gmail.com] 13 07:16 AM
Subject: Re: EIA - off the West Coast	Exploration Drilling by Shell in the Orange Basin Deep Water License Area of South Africa
ні	
Please send this to	me in Afrikaans if you dont mind.
Thank you	
On 10/30/13, Mfowab > Dear Sir / Madam	o Maphosa < <u>MfowaboM@nma.org.za</u> > wrote:
>	
2	
 > This email contai > providing informa > ("Shell") to unde > Water Licence Are > opportunity to re > provide initial composition 	ns a letter and Background Information Document (BID) tion on the proposal by Shell South Africa Upstream B.V. rtake exploration drilling in the Orange Basin Deep a off the West Coast of South Africa and the gister as an Interested and Affected Party (I&AP) and omment.
2	
5	
> This letter and t > upon request.	he BID are also available in Afrikaans and isiXhosa
>	
2	
> Hierdie brief en > versoek in Afrika	die Agtergrondinligtingsdokument (AID) is ook op ans en Xhosa beskikaar,
3	
>	
> Le ncwadi noXwebh > ngeAfrikaans nang	u loLwazi lweMvelaphi (BID) ziyafumaneka kananjalo esiXhosa ngokwesicelo.
2	

Mfowabo Maphosa Gill Maasburg [gmaasburg@jmss.co.za] From: 12 November 2013 02:31 PM Sent: To: Mfowabo Maphosa RE: FW: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the Subject: West Coast of South Africa Good day Thank you for the invitation below however, Japan Marine Supplies and Services are unable to send a Representative. Kind regards GILL MAASBURG PA TO CHRISTIAAN KOTZE, MD **JAPAN MARINE SUPPLIES & SERVICES** TEL: +27 21 514-4507 FAX: +27 21 514-4599 gmaasburg@jmss.co.za From: Mfowabo Maphosa [mailto:MfowaboM@nma.org.za] Sent: 11 November 2013 04:01 PM To: Gill Maasburg Subject: *** SPAM ***FW: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa From: Mfowabo Maphosa Sent: 11 November 2013 02:14 PM Subject: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa Dear Sir / Madam This email provides a reminder that a public open day (POD) and information-sharing meeting will be held in Saldanha tomorrow on the Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa. The public open day will take place between 14h00 and 17h30 and representatives of Shell South Africa Upstream B.V. and the environmental consultant will be present to discuss the project or any issues or concerns you may have. The information-sharing meeting will take place at 17h30 and will consist of a formal presentation on the project and the environmental impact assessment, followed by a question and answer session. Details of the public open day and information-sharing meeting are as follows:

Date:	Tuesday 12 November 2013					
Location:	Saldanha					
Venue:	Protea Hotel 51 Main Road, Saldanha					
Time: POD	14h00 - 17h30					

From:	Mfowabo Maphosa
Sent:	11 November 2013 03:23 PM
To:	'Jeremy Marillier'
Subject:	RE: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa
Attachments:	Shell OB BID - English 23 Oct 2013 FINAL.pdf; image001.jpg; image002.gif; image003.png; image004.gif

Dear Jeremy

Please find attached a copy of the background information document (BID).

Best Regards Mfowabo

From: Jeremy Marillier [mailto:jeremy@fishsa.org] Sent: 11 November 2013 11:00 AM To: Mfowabo Maphosa Subject: RE: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa

Hi Sir

Given short notice I am unable to attend, if we can have copies of presentation and EIA then I can send written comments thanks Jeremy

From: Mfowabo Maphosa [mailto:MfowaboM@nma.org.za] Sent: 11 November 2013 10:43 AM Subject: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa

Dear Sir / Madam

This email provides a reminder that a public open day (POD) and information-sharing meeting will be held in Cape Town today on the Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa. The public open day will take place between 14h00 and 17h30 and representatives of Shell South Africa Upstream B.V. and the environmental consultant will be present to discuss the project or any issues or concerns you may have. The information-sharing meeting will take place at 17h30 and will consist of a formal presentation on the project and the environmental impact assessment, followed by a question and answer session. Details of the public open day and information-sharing meeting are as follows:

Date:		Monday 11 November 2013				
Location: Venue:		Cape Town Granger Bay Hotel School Beach Road, Mouille Point				
Meeting	17h30 - 20h00					

We would like to invite you to attend the public open day (POD) and/or information-sharing meeting to learn more about this important project.

20.000	
From:	Mtowabo Maphosa 11 Nevember 2013 02:03 PM
Sent.	mvinbu@offchoreafrica.co.za
Subject:	RE' Proposed Evolocation Drilling in the Orange Basin Deep Water Ligense Area off the
oubject.	West Coast of South Africa
Attachments:	~WRD000.jpg; image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg image006.gif; image007.png; image008.gif
Dear Mr Xiphu	
Thank you for confi	ming your attendance to the public meeting.
Regards	
Mfowabo	
From: Mthozami Xij Sent: 11 November To: Mfowabo Mapho	ohu [mailto:mxiphu@offshoreafrica.co.za] 2013 02:00 PM osa
Subject: RE: Propo Africa	sed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South
Dear Mr Maphosa	
just wish to confirm	n that It is the 17h30 session that I will be able to attend, and not the 14h00.
Thanks.	
Mthozami.	
	Mthozami R. Xiphu Executive Chairman
	Suite 604 6 th Floor 4 Loop Street Cape Town 5001 T+27 21 425 8840 C+27 82 453 6745 T direct +27 21 425 1091
	mxiphu@saoga.org.za w.ww.saoga.org.za
"Serving the interests	of industry and members in the upstream & midstream oil & gas industry."
Disclaimer: This message or named addressee you shou	ontains confidential information and is intended only for the individual named. If you are not the Id not disseminate, distribute or copy this e-mail. Please notity the sender immediately by e-mail if you

receive sour cause you anoun not asseminate, assnoute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and belete this e-mail from your system. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission.

From:	Mfowabo Maphosa
Sent:	12 November 2013 11:16 AM
To:	"Romer, Oliver"
Cc:	Nomi Muthialu; Julian Drew
Subject:	RE: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa
Attachments:	image001.jpg; image002.gif; image003.png; image004.gif

Dear Mr Römer

Thank you for your email.

We have forwarded your contact details to Shell so that somebody can contact you in this regard.

Best Regards Mfowabo Maphosa

From: Romer, Oliver [mailto:Oliver.Romer@nov.com] Sent: 11 November 2013 12:16 PM To: Mfowabo Maphosa Subject: RE: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa

Hi Mfowabo Thank you for your reminder email.

Please can I get the necessary contact person and/or forms to register as supplier for Shell. As we are now part of National Oilwell Varco, we wish to ensure we are registered correctly.

Kindest regards,

Oliver Römer Director NOV Rig Solutions SSA +27 83 647 4004

Mfowabo Mapho	sa
From: Sent: To: Cc: Subject:	Mfowabo Maphosa 11 November 2013 03:25 PM 'Roland@mecs.co.za' 'williams@saoga.org.za' RE: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa
Attachments:	Shell OB BID - English 23 Oct 2013 FINAL.pdf; image001.jpg; image002.jpg; image003.jpg
Dear Roland	
Please find attache	d a copy of the background information document (BID).
Best Regards Mfowabo	
From: Rita Williams Sent: 11 November To: 'Roland Glass' Cc: Mfowabo Mapho Subject: RE: Propos Africa	[mailto:rwilliams@saoga.org.za] 2013 02:00 PM sa sed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South
Dear Roland,	
I will ask Mfowabo, (cc in) on whose behalf SAOGA has send out the email to assist you - rgds
From: Roland Glass Sent: 11 November To: South African Oi Subject: RE: Propos Africa	[mailto:Roland@mecs.co.za] 2013 01:13 PM I & Gas Alliance sed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South
To whom it may con	cern,
am unable to atten	d the event at short notice. May I please have a copy of the presentations for my reference?
Regards,	
Roland	

From: South African Oil & Gas Alliance [<u>mailto:info@saoqa.org.za]</u> Sent: Monday, November 11, 2013 12:35 PM To: Roland Glass Subject: Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa

From: Sent: To: Cc: Subject: Attachments: Mfowabo Maphosa 12 November 2013 10:50 AM 'Bheki Ngcobo' 'apulfrich@pisces.co.za'; 'rbyrnes@iemseg.com'; Nomi Muthialu; Julian Drew RE: Orange Basin EIA image001.jpg

Dear Mr Ngcobo

Thank you for your email. I acknowledge receipt thereof.

We have forwarded your comments to the Shell Team and your comments will be included in the Issues and Responses Report.

Best Regards Mfowabo Maphosa

From: Bheki Ngcobo [mailto:bheki@imdhgroup.com] Sent: 11 November 2013 04:16 PM To: Mfowabo Maphosa Cc: Richard Bymes; apulfrich@pisces.co.za Subject: Orange Basin EIA

Dear Mfowabo

I am unfortunately un-able to attend the event but see the below email and attachment ,also pass it to the Shell Team as a matter of transparency on the issues raised by our Marine Environmentalists colleagues in Egypt.

Kind Regards Bheki Ngcobo Chief Executive Officer

Dear Bheki

Please find attached the review of the Orange Basin Background document, it is clear that this is not an EIA or environmental Management plan. It is a generic document outlining authorization and intentions.

There is no mention of conventions, existing systems or the resources in South Africa to deal with an oil spill. The National Oil Spill Plan was not mentioned nor was the 25 Coastal plans and even more worrying was that there was no mention of the Shell Oil spill plan or the integration with existing plans or resources.

There is a highlighted section in the Shell Background document on the capping equipment, however again no mention of MOB/Deployment or the amount and location of dispersant.

I am not saying resources and capability is not there, I am saying information and coordination is severely lacking in your country.

Please feel free to use the attached document, There is a public consultation in Cape Town today with another in Saldhana tomorrow hosted by Shell.



International Environmental & Marine Services (IEMS) SA - Orange Basin DW Drilling BACKGROUND DOCUMENT - (Dated October 2013) Review



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SECTION – 5 Consultancy Services

Prepared ByEng Khaled El HawTitleConsultancy ManagerDate09/11/13

Document	Consultants					
Background Document.	CCA Environmental (Pty) in association with NMA					
Dated October 2013	Effective Social Strategies (Pty) has been appointed by					
DEA REFERENCE NO.: 14/12/16/3/3/1/1063	Shell to compile EMPr.					

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INTRODUCTION

IEMS has reviewed the Background Information Document dated October 2013 produced by Royal Dutch Shell for the Proposed Exploration Drilling in the Orange Basin Deep Water License Area off the West Coast of South Africa. DEA REFERENCE NO.: 14/12/16/3/3/1/1063. It is understood that the Background document purpose stated in section 2 serves to;

- Inform interested and affected parties (I&APs) about the legislative processes that Shell is required . to comply with;
- Provide a description of the proposed exploration well drilling operation and the Impact Assessment process; and
- Present the specialist consultants' scope of work and how I&APs can participate in the process.

The following are IEMS views on the information contained within the background Information document and are not reflective of any studies undertaken or environmental management plans either being compiled or in existence.

The following suggested consultation questions are related to the information available and should be considered in conjunction with the relevant following statements contained within this document.

s/N	Suggested Consultation Questions	Page Reference
1	What Historical Data shall be used in the EIA?	2
2	What baseline information exists and where are the gaps?	2
3	 What legislative framework shall be used International Conventions to be applied? What National laws shall be used in Context? What is the status of the National Oil Spill Contingency Plan (NOSCP)? 	2
4	Is Shell oil spill contingency Plan linked to the NOSCP? What are the restriction placed on the marine protected areas should a shoreline response be required?	5
5	Shall an Oil Spill Response Analysis (OSRA) be conducted to determine current response status? Including the well Capping Capability in Saldanha bay?	5
6	What industry standards are being applied?	6
7	When the project parameters shall be finalized for consultation?	6
8	 Shall the following considerations be unique to South Africa? Environmental Impacts of Routine Activities Air Emissions Operational Effluent Discharge Support Activities Impacts on fishing Spill of Hydrocarbons (Oil Spills) 	7- 9



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1. HISTORY OF DRILLING ACTIVITIES

To put the proposed drilling program into historical context and identify potential pre-existing Impacts from oil industry activity, it is important to examine previous oil and gas operations in this area. (Or other neighboring countries within the African Continent)

2. BASELINE INFORMATION

The level of baseline economic, social and environmental information available shall determine the depth and effectiveness of the EIA. A gap analysis maybe required to determine the areas requiring further studies.

- Ports .
- Tourism
- Fisheries
- Offshore Activities (Including Diamond Mining)
- Oil Spill and drill cutting Trajectory and Stochastic modeling (2D and possibly 3D)
- Benthic & metocean surveys,
- Seabird, penguin and cetacean studies

3. LEGISLATIVE FRAMEWORK

The background document relates to authorizations required when in fact there are certain international conventions and national laws that must be complied with, obtaining authorization should include adherence to the international conventions and the context of national laws. Table 3.1 and 3.2 are examples only:

Table 3.1 International Conventions and Agreements												
Prevention and Safety					Spill Response		Compensation					
Marpol Annexes			OPRC 90	OPRC HNS	CLC		Fund	HNS	Bunker			
73/78		IV	V	VI			69	76	92	92		
v	٧	٧	٧	٧	V		٧		٧	V		
Descrip	otion				Full Title		Stat	us		Summa	iry	
MARPOL 73/78				1973 Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978		Most of the subsidiary agreements Ratified.			Considers and seeks to prevent pollution by oil, chemicals, and harmful substances in packaged form, sewage and garbage from ships.			
OPRC				International Convention on Oil Pollution Preparedness, Response and Co- operation (OPRC)		entering into force in 1995			International maritime convention establishing measures for dealing with marine oil pollution			
CLC				Civil Liability Convention					Adopted to ensure that adequate compensation is available to persons who suffer oil pollution damage resulting from casualties			

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Table 3.1 International Conventions and Agreements cont..... The International Oil Pollution Compensation Fund 1992 International (IOPC Fund 1992 or 1992 Convention on the Fund) was established under Establishment of an the 1992 Fund Convention in 92 Fund International Fund for order to provide Compensation for Oil compensation for victims who Pollution Damage, do not obtain full 1992 compensation under the 1992 Civil Liability Convention.

3.1 International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC)

Scope - The OPRC Convention applies to:

- V of any type whatsoever operating in the marine environment including hydrofoil boats, air-cushion vehicles, submersibles, and floating craft of any type;
- Fixed or floating offshore installations or structures engaged in gas or oil exploration, exploitation or
 production activities, or loading or unloading of oil; and
- Sea ports and oil handling facilities (those facilities which present a risk of an oil pollution incident, including, inter alia, sea ports, oil terminals, pipelines and other oil handling facilities).[3]

The Convention does not apply to warships, naval auxiliary or other ships owned or operated by a State and used only on government non-commercial service. However, Parties to the Convention ensure by the adoption of appropriate measures that such ships act in a manner consistent with the Convention.

3.1.1 Oil pollution emergency plans (Oil Spill Contingency Plans)

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Ships are required to carry a shipboard oil pollution emergency plan, in accordance with the provisions adopted by the International Maritime Organization (IMO) for this purpose. These plans are subject, while in a port or at an offshore terminal under the jurisdiction of a Party, to inspection by officers duly authorized by that Party.

Operators of offshore units under the jurisdiction of the Parties are required to have oil pollution emergency plans, which are co-ordinated with the national system for responding to oil pollution incidents, approved in accordance with procedures established by the competent national authority.

Authorities or operators in charge of sea ports and oil handling facilities under the jurisdiction of Parties are also required to have oil pollution emergency plans or similar arrangements which are co-ordinated with the national oil pollution response system.



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3.1.2 National and regional systems for preparedness and response (OPRC Requirement)

South Africa is under obligation to establish and maintain a national system for responding promptly and effectively to oil pollution incidents. The system required comprises:

- Designated competent national authority or authorities with responsibility for oil pollution preparedness and response;
- National operational contact point or points, responsible for the receipt and transmission of oil pollution reports; and
- Authority which is entitled to act on behalf of the State to request assistance or to decide to render the assistance requested.

Also, the system must include a national contingency plan for preparedness and response outlining the organizational relationship of the various involved bodies, public or private, taking into account guidelines developed by the IMO.[6]

In addition, South Africa, either individually or through bilateral or multilateral co-operation and in co-operation with the oil and shipping industries, port authorities and other relevant entities, has to establish:

A minimum level of pre-positioned oil spill combating equipment and programs for its use;

- A program of exercises for oil pollution response organizations and training of relevant personnel;
- Detailed plans and communication capabilities for responding to an oil pollution incident; and
- A mechanism or arrangement to co-ordinate the response to an oil pollution incident with the capabilities to mobilize the necessary resources).[7] Parties ensure that all relevant information is provided to the IMO.

3.1.3 International co-operation in pollution response

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Parties are required to co-operate and provide advisory services, technical support and equipment for the purpose of responding to an oil pollution incident upon the request of any Party affected or likely to be affected by such incident. The financing of the costs for such assistance is based on the provisions set out in the Annex to the Convention.

3.2 National Legislation

National Legislation (See Table 3.2) should also include reference to the National contingency plan for preparedness and response outlining the organizational relationship of the various involved bodies, public or private. (DEA and SAMSA)

The South African National Contingency plan is currently under revision and extensions to include spills of chemicals. 25 Local Coastal Oil Spill Contingency Plans, compiled by DEAT, detail appropriate actions to be taken upon threatened or actual impact. These are supported by a comprehensive Coastal Sensitivity Atlas. Individual plans for oil handling facilities are in place, drawn up by the oil industry, represented by the Oil Industry Environment Committee (OIEC). The cleanup of oil spills in port has been delegated to PORTNET, the ports administration. Plans are established for each port. (Source- ITOPF South Africa Country Profile)

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Table 3.2 - National Legislation							
	Requirement of obtaining an exploration right is that an EMPr must be compiled in terms of Section						
Mineral and Petroleum Resources Development	39 of the MPRDA, submitted to Petroleum Agency						
Act, 2002: Environmental Management Program	SA (PASA) for consideration and approval by the						
	Minister of Mineral Resources (or the delegated						
	authority)						
	The Environmental Impact Assessment (EIA)						
	Regulations 2010 promulgated in terms of Chapter						
National Environmental Management Act, 1998:	5 of NEMA provide for the control of certain						
Basic Assessment	activities that are listed in Government Notices						
	(GN) R544 (Listing Notice 1), R545						
	(Listing Notice 2) and R546 (Listing Notice 3).						

4. MARINE PROTECTED AREAS

South African Marine protected areas, are regions in which human activity has been placed under some restrictions in the interest of conserving the natural environment, its surrounding waters and the occupant ecosystems, and any cultural or historical resources that may require protection. The following are the marine protected areas in South Africa. The location of the MODU, the activities of the support vessels and shore side logistics shall need to consider these marine protected areas.

- Aliwal Shoal Marine Protected Area (KwaZulu-Natal)
- Betty's Bay Marine Protected Area (Western Cape)
- Bird Island Marine Protected Area (Eastern Cape)
- De Hoop Marine Protected Area (Western Cape)
- Dwesa-Cwebe Marine Protected Area (Eastern Cape)
- Goukamma Marine Protected Area (Western Cape)
- Helderber Marine Protected Area (Western Cape)
- Hluleka Marine Protected Area (Eastern Cape) .
- iSimangaliso Marine Protected Area (KwaZulu-Natal)
- Jutten Island Marine Protected Area (Western Cape)
- Langebaan Lagoon Marine Protected Area (Western Cape)
- Malgas Island Marine Protected Area (Western Cape)
- Marcus Island Marine Protected Area (Western Cape)
- Pondoland Marine Protected Area (Eastern Cape) Robberg Marine Protected Area (Western Cape)
- Sardinia Bay Marine Protected Area (Eastern Cape)
- Sixteen Mile Beach Marine Protected Area (Western Cape)
- Stilbaai Marine Protected Area (Western Cape)
- Table Mountain Marine Protected Area (Western Cape)

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- Trafalgar Marine Protected Area (Eastern Cape)
- Tsitsikamma Marine Protected Area (Eastern Cape)



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5. OIL SPILL RESPONSE ANALYSIS (OSRA)

Often the EIA as well as the oil spill contingency plans outline response actions, in this regards It is recommended that an Oil Spill Response Analysis be conducted to determine that equipment, processes and procedures are in place and relevant.

The purpose of the Oil Spill Response Analysis (OSRA) is to identify what emergency preparedness systems are in place to combat an oil spill, and to evaluate whether these resources are available within acceptable response times. Based on the OSRA and conditions set in the permit to operate by the Department of Environment (DEA), an Oil Spill Contingency Plan (OSCP) must be established before the drilling commences. If an acute oil spill occurs, the established OSCP will come into force.

The OSRA is based on information available from the Operator, DEA, SAMSA, PORTNET and other oil and gas companies or organizations with area specific experience.

The purpose of oil spill response is to minimize environmental damage. Therefore, the natural resources that contribute to environmental risk must form the basis for the oil spill response. The combat strategy is primarily based on mechanical cleanup close to the source, and by establishment of more than one Response Scenario, to collect oil that passes the first tactical Response Line and to prevent stranding of oil in vulnerable sites and habitats.

To be able to use the available contingency systems most efficiently a proper system for detection and monitoring of the oil spill must be in place. The detailed plans for handling acute spills will be described in the OSCP.

Factors that affect the choice of strategy are discharge rate and amounts, weather, oil characteristics and oil spreading/weathering, as well as the presence of vulnerable environmental resources.

The following Response Options are based on the Tiered Response Concept and are considered to the extent necessary:

Response Expectations Response Expectations Response Expectations Long Term Expectations

Immediate: Combat at open sea 24 Hours: Combat at open sea / Evaluate coastal response 48 Hours: Protect high priority resources Stakeholders

The OSRA should result in discussions of response systems, barriers and expectation times, together with adequate systems for oil spill monitoring and mapping and post-spill investigations.

Consideration: - Advanced well intervention and capping equipment is available in Saldanha Bay for deployment in the event of a subsea well control incident. The subsea well intervention system includes four capping stacks to shut-in an uncontrolled subsea well and two hardware kits to clear debris and apply subsea dispersant at a wellhead.

What are the limitations of this equipment, area preparation time, mobilization and deployment time?

Is there sufficient dispersant available, approved and suitable back-up stock?

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6. INDUSTRY STANDARDS & GUIDELINES

The International Association of Oil and Gas Producers (OGP) developed recommendations following the Macondo (Gulf of Mexico) and Montara (Australia) and other similar incidents. The recommendations are available either publicly via their website, or to members of the association. Elements of these recommendations should be referenced and utilized in the development of the operations specific Environmental Management Plan (EMP) and or EIA. http://www.ogp.org.uk/pubs/465.pdf

7. PROJECT DESCRIPTION

The drilling rig/ship and contractor have not been finalized at the time of writing, most operational parameters have not been fully established (actual well locations and target depths, support infrastructure, supply routes and drilling schedule).

The Background information document outlines the use of Water Based Mud (WBM) with drill cuttings and WBM being released onto the seafloor, throughout the initial drilling campaign.

Following the initial stages of drilling Synthetic Based Mud (SBM) shall be used with the drill mud returned for treatment and removal of solids, the cutting shall be treated and discharged overboard.

For overboard discharge of cuttings the permit target appears to be 6.9%, however with improved cleaning using solids control equipment a target can be achieved less than 5%.

8. CONCLUSION

The Shell Group is a de-centralized, diversified group of companies with widespread activities, and each Shell company has wide freedom of action. However what all Shell companies have in common is the Shell reputation. Upholding the Shell reputation is paramount.

It is understood that Shell shall appreciate any and all comments during the public consultation events (see table 8.1) that are practical and feasible in the proposed drilling campaign. IEMS as a Seaharvest company has compiled this document to reflect IEMS experience and to assist where practical the Shell drilling campaign together with the support IEMS can provide to interested parties.

Table 8.1 – F	Public Consultation
Location - Cape Town	Location - Saldanha
Date - Monday 11 th November	Date - Monday 12 th November
Venue – Granger Bay, Hotel School, Beach	Venue – Protea Hotel, 51 Main Road, Saldanha
Road, Moille Point	Bay
Time (Public Open Day) 14:00 – 17:30	Time (Public Open Day) 14:00 – 17:30
Time (Information Sharing Meeting)	Time (Information Sharing Meeting)
17:30 - 20:00	17:30 - 20:00

IEMS accepts no liability or responsibility whatsoever for the information contained herein with respect to any use of or reliance upon this information by any third party.

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	BACKGROUND DOCUMENT - (Dated October 2013) Review	
LIKELY KEY IMPACTS	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT
1.0 Environmental Impacts of Routine Activities		
Physical damage to benthic communities due to placement of drilling unit	Any mitigation required shall depend on type of drilling unit.	 To be determined in EIA
2.0 Air Emissions		
Impacts on air quality and release of greenhouses gases.	 Rig and vessels must comply with MAPROL Annex VI, which sets limits on sulphur dioxide and nitrogen oxide emissions from exhausts and prohibits deliberate emissions of ozone depleting substances. Routine inspection and maintenance of engines, generators and other equipment to minimize air emission Use of low-sulphur diesel if available locally 	 To be determined in EIA
3.0 Operational Effluent Discharge		
Impacts on Water quality near the MODUs	 All discharges from the MODUs and supporting vessels should be treated and discharged in accordance with the MARPOL convention Compliance with project effluent guidelines including oil and grease. 	 To be determined in EIA
4.0 Solid Waste		
Wastes will include hazardous and non- hazardous wastes.	 Shell should develop a drilling waste management plan addressing requirement for waste segregation to facilitate appropriate onshore treatment and/or disposal. As far as reasonably practicable, all material brought ashore will be sent for re-cycle, re-use or properly disposed of. 	• To be determined in EIA

International Environmental & Marine Services (IEMS)

Section: 5	marine resources fron spill	Potential catastrophic	70 Caill of Undrocarb	 Operational d activities 	 Exclusion zone disrupt fishing 		6.0 Impacts on fishing	Onshore support base water and waste dispo	Increased strain on sei	turtles and birds could	marine mammal or se	also a potential for sup	could disturb coastal b	Helicopters flying over	5.0 Support Activities	ALL A	IEMS	
Revision:01	n blow-out or hydrocarbon	impacts on marine fauna		ischarges may affect fishing	e for the MODUs may activities in the vicinity		5	will require electricity, sal services	rvice provisions	t be expected	a turtle and minor	pport vessel striking a	bird population. There is	 Important Bird Areas 				
Issue: 01 Issue Date: 9 th Nc	Pollution tenergency Plans (SOPEP) as required under the MARPOL Convention and materials to handle spills onboard (eg adsorbents, approved containers for storage and shipment of spill wasters, disposable bags, gloves/goggles etc).	 Shell must prepare an Oil Spill Contingency Plan in line with the South African National oil spill contingency plan, Response Equipment such as Vessels, skimmers and booms checked, listed and maintained. The MODU and support vessels must have shinkpard Oil 	discharge	 advance of location and schedule of project activities. Treat all effluents according to MARPOL standards prior to 	 sea fishers and artisanal fishing villages. Inform port authorities and commercial fishing operations in 	 Establish clear communication channels with commercial deep 		advance of the nature of services that will be required for service provision	 Inform Authorities at Saldhana Bay and or Cape Town in 	minimize alsturbance	altitude should be maintained when flying over this area to	wetlands IBA. If avoidance is not possible a minimum agreed	 Helicopters flying from Klienzee should avoid flying over the 			BACKGROUND DOCUMENT - (Dated October 2013) Reviev	SA - Orange Basin DW Drillir	
vember 2013 Page 11 of 11	progressively more severe impact on the marine and coastal environment. The magnitude would be determined by the efficiency of cleanup operations.	Note* Small spills may occur during bunkering. Provided they are cleaned up efficiently, they will pose little threat to marine life. Larger spills although extremely mere would pose a		 To be determined in EIA 				 To be determined in EIA 				 To be determined in FIA 					00	(CIA)