

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Andy Pienaar

Date 2021/05/02 Method Email

Comment

Heil die Leser, Ons groet u en wens graag die volgende dringende versoek aan u te rig. Dat u as n saak van dringende noodsaaklikheid weer die inligtingsessie oor die moontlike eksplorasi en ontginning van die gasvelde aan die Namakwalandse kus, met die belanghebbende en geaffekteerdes van die area, sal kom hou. Ons rig hierdie versoek omdat u vorige poging as gevolg van laat en gebrekkige kennisgewing nie al ons mense bereik het nie en die opkoms SWAK was. Inderhalwe wil ons vra dat u van gevestigde structure soos ons radiostasie, CDW's en organisasies soos hierdie gebruik sal maak om vooraf kennis van die vergadering uit te saai. Geliewe, ons wil verder vra dat al u kommunikasie en insette verkieslik in Afrikaans gedoen word en dat u ons gemeenskappe sal bemagtig om die byeenkoms by te kan woon deur die subsidiering van transport. Gemeenskappe wat deur hierdie versoek geraak word is Hondeklipbaai, Soebatsfontein, Koiingnaas, Kleinzee, Komaggas en Buffelsrivier. Ons dank u en vertrou dat u dringende aandag aan ons oproep sal gee. Agtend Andy Pienaar Kobush Ontwikkelingsvereniging

Response

EIMS phoned Mr Pienaar to confirm the dates for the public open day at Kleinzee and requested if any additional people should be contacted in this regard. Mr Pienaar confirmed that he would

Date 2021/05/02 Method Email

Comment

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Response

Dankie vir u e-pos. Ons neem kennis van u versoek en kan bevestig dat ons weereens publieke ope dae sal hou in die komende maand. Die details sal binnekort uitgestuur word aan alle geregistreerde belanhebbende en geaffekteerde partye. Ons sal in verbinding met u wees rakende die voorgestelde strukture en toepaslikheid rondom hierdie strukture vir die kennisgewing van die publiek ope dae.

Date 2021/08/11 Method Email

Comment

Response

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Andy Pienaar

Ek reken dit sal goed wees indien u ons Raadslid mnr Paulus van Reenen ook na die event kan uitnooi. Sy nommer is 064 829 7140. Die volgende een is mnr George Cloete wat ons geskiedenis ken en sy nommer is 0845655971 Soos beloof is ons besig om ten minste tien mense vanaf Komaggas en Buffelsrivier te bring na die vergadering. Ons hoop nie dit sal die event oorstrom nie.

Baie dankie vir die inligting. Ons het vir Mnr Van Reenen en Mnr Cloete gekontak en hulle het bevestig dat hulle as belanghebbende partye geregistreer wil wees. Mnr Cloete het genoem dat hy die inligting by u sal kry rakende die ope dae.

Date 2021/10/06 Method Email

Comment

Waarde heer, Met verwysing na die impakstudie wat u op Kleinsee op 21 September 2021 aangaande die aansoek van Tosaco En-ergie om vir olie en gas in blok een net buit Kleinsee temag boor wens ons die volgende kommentaar te lewer. Dat ons nie tevrede is met die proses soos wat dit afgeleef het nie veral in die sin dat daar nie genoegsaam mense of organisasies van mense by die proses teenwoordig was nie; Dat die proses behalwe vir waar dit in Afrikaans vertaal was nie juis toeganklik vir ons mense was nie as gevolg van die taal (Engels) en ook die gebruik van tegniese uitdrukkings en omslagtige en vervelende uitdrukkings; Dat dit in ons opinie nie sou voldoen aan die verwagtinge van NEMA nie waar dit sou verwag dat die betrokke gemeenskappe deeglik ingelig sou wees totdat hulle die proses ten volle verstaan het. Ons verwys spesifiek na ons versoek dat fondse beskikbaar gestel sou word om mense, wie 'n direkte belang by die oseaan ekonomie het en wie in afgeleef gemeenskappe woon, na die gesprekke te bring. Ons verwys ook na ons spesifieke versoek dat die spesialiste wie die impakverslae opgestel het met die plaaslike kennis en wedervaring sou interaksie het om die inhoud van ons gemeenskappe ook in berekening te kon bring. Dit het nie plaasgevind nie. Die aanbieding het ons ook nie oortuig dat die proses om te prospekter nie 'n negatiewe impak op die visbedryf van die streek gaan het nie; Nog minder het dit ons oortuig dat die seelewe aan ons kus nie nadelig beïnvloed word nie. Ons is ook bekommerd oor die impak wat die prospektering en die uiteindelijke boorproses op die beskermde areas rondom die blok een gaan he. Ons is veral bekommerd dat hierdie 'n ekonomiese anneksasie gaan wees wat ons mense gaan uitsluit veral omdat daar nêrens in die verslag voorsiening gemaak word vir alternatiewe geleenthede vir die plaaslike inwoners nie. Ons betreur ook die feit dat die verslag nie aandeelhouding vir die plaaslike inwoners in die vooruitsig stel nie. Ons verwerp dus die aansoek en vertrou dat die regering nie aansoek sal toestaan nie

Response

Ons verwys na u e-pos van 24 Augustus 2021, die e-pos van 27 Augustus 2021. Ons wil u ook gerus stel dat die MS Teams toepassing een van die beter toepassings is vir vergaderings van hierdie aard en dat dit vrylik beskikbaar is. Dit is ongelukkig afhanklik van goeie internet sein. Ons bevestig dat ons u kommentaar gedurende hierdie vergadering kon hoor en dat dit so opgeneem is. Soos genoem gedurende die virtuele vergadering van 27 Augustus 2021, was die rede vir die virtuele vergadering nie om uitvoering te gee op u versoek vir verdere konsultasie met die plaaslike gemeenskap nie, maar om 'n geleentheid te gee vir diegene wat nie die plaaslike vergaderings kon bywoon nie, om hulle kommentaar te lewer rakende die projek. Ons wil u graag daarop wys dat EIMS uitstel verkry het van die bevoegde owerheid juis om addisionele konsultasie met die gemeenskappe te hou. Ons het gevolglik hierdie vergaderings gehou gedurende September met die lede van die gemeenskap, vissermanne en die kooperatiewe in Port Nolloth, Kleinsee en Hondeklipbaai. Ons wil u daarop wys dat hierdie projek volgens die inligting wat ons van die vissermanne en ander in plaaslike gemeenskappe ontvang het, steeds 'n kleinskaalse impak gaan hê veral omdat die aansoek area dieper seewaarts geleë is as waar die plaaslike vissermanne visvang. Ons sal verseker dat u kommentaar ingesluit word in die verslag en dat die bevoegde owerhede dit sal ontvang en ons neem kennis dat u deelname aan die proses nie as goedkeuring vir die ontwikkeling nie. Ons verwys verder na u brief van 4 Oktober 2021. Ons wil u daarop wys dat die vergadering aan al die belanghebbende partye versprei is, en dat dit op die plaaslike gemeenskapsgroepe versprei is. Ek verwys na die telefoon gesprek waar ons u spesifiek uitgenooi het na die vergadering, maar dat u bevestig het dat u nie die vergadering kon bywoon nie, en dat u ander afgevaardigdes sou stuur – en dat u dit verder ook op u Komaggas Facebook blad gelaai het. Gevolglik is dit ons opinie dat daar voldoende kennisgewing gegee is aan al die betrokke partye rakende die vergadering. U stelling dat “die spesialiste wie die impakverslae opgestel het met die plaaslike kennis en wedervaring sou interaksie het om die inhoud van ons gemeenskappe ook in berekening te kon bring. Dit het nie plaasgevind nie.” Is ongelukkig nie akkuraat nie. Daar wel 'n aantal mense opgedaag vir die vergadering in September 2021 te Kleinsee, waar, soos deur u versoek in die vorige vergadering met u gedurende Augustus 2021 te Kleinsee, die vissery spesialis teenwoordig was. 'n Marine Mammal Observer (MMO) was ook teenwoordig en die vergaderings is in Afrikaans voorgedra en die

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Andy Pienaar

Afrikaanse opsommings van die OIS verslag is aan alle insittendes voorsien. Soos genoem aan u gedurende ons gesprek, het ons gepoog om te kyk of ons kon fondse beskikbaar stel, maar hierdie fondse was ongelukkig nie beskikbaar nie. Ons neem kennis van u opinie rakende die negatiewe impakte en die ekonomiese anneksasie – ons kan ongelukkig nie kommentaar lewer oor die toekomstige aktiwiteite nie, aangesien die omvang van sulke aktiwiteite nie bekend is nie en ons dit dus nie kan assessee as deel van hierdie OIS nie.

Elizabeth Balcomb

Date 2021/03/24 Method Email

Comment

To you future eaters Please would you register me as an Interested and Affected Party for your drilling my ocean for oil and gas Offshore N cape. May you be plagued by all the flesh eating creatures our mother earth can send your way.

Response

Dear Elizabeth, Thank you for your correspondence. Kindly note that you have been registered on the I&AP database for the Tosaco Exploration Right Project. As a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA reports and associated appendices once they become available. Should you have any further comments or queries please feel free to contact EIMS.

Marcus Banga

Date 2021/03/18 Method Email

Comment

Good Morning Sir/Madam Please find our completed form where by we express our interest in the Offshore Exploration Project as advertised.

Response

Good Morning, Kindly note that you have been registered on the project database. As a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA reports once they become available. Should you have any comments or queries please feel free to contact EIMS.

Thalita Van de Berg

Date 2021/09/27 Method Email

Comment

Goeie dag Stuur asb die link vir die vergadering vanmiddag re: NOTIFICATION REGARDING OPPORTUNITY TO PARTICIPATE IN ENVIRONMENTAL AUTHORISATION APPLICATION PROCESS FOR THE PROPOSED TOSACO BLOCK 1 EXPLORATION RIGHT EIA PROJECT, LOCATED OFFSHORE EXTENDING FROM ALEXANDER BAY TO APPROXIMATELY HONDEKLIP BAY, NORTHERN CAPE, SOUTH AFRICA.

Response

Dear Thalita, Thank you for your correspondence. Please see the link to register for the webinar that will be held on Microsoft teams today at 13:00 as per the notification letter attached. Kindly register to reserve your space on the meeting. Webinar Link: https://teams.microsoft.com/registration/sU6H5z0n7kudxA2EINu4JA,iAKBatbrSU2qAUveW_L7Ag_AjAREdV7C0ONCQrPt NeMIA,0QJcZ9INgEGUxaJ_inLmw,i23YPcdNgkiPnkWArjRaQ,

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Thalita Van de Berg

rz1MxKXLY02vMIDyNQDbwA?mode=read&tenantId=e7874eb1-273d-4bee-9dc4-0d8494dbb824
May you please feel free to let EIMS know if you have any queries or issues in this regard.

Refilwe Shelembe

Date 2021/03/24 Method Email

Comment

Dear Cheyenne I trust the you are well. Thank you for the notices of the EIAs. We are reporting to the DMRE (where these are submitted). We will be conflicted to comment on the same unless the DMRE request our technical input directly. If we comment – it will be DMRE who is the authority here commenting on what they will adjudicate. I am writing to you so that you do not get surprised when we do not respond. I have noted several of these as well. It is however good to know about the EIA's. Regards and keep well.

Response

Dear Mr Shelembe, Thank you for your correspondence. It is understood that comments will be directly submitted to the DMRE on this matter. Should you require any additional information please do not hesitate to contact EIMS.

Mr Adrian Pole

Date 2021/02/25 Method Email

Comment

Dear Ms Muthukarapan We have been asked by the Green Connection to assist it in participating in this EIA process. The Green Connection is a registered non-governmental organisation that believes that economic growth and development, improvement of socio-economic status and conservation of natural resources can only take place within a commonly understood framework of sustainable development. Green Connection aims to provide practical support to both the government and non-governmental/civil society sectors, which are an integral part of sustainable development. We would be grateful if you could register the Green Connection as an interested and affected party for the purposes of this EIA, and copy us in on any further project information and opportunities for participation.

Response

Dear Mr Adrian, Thank you for your correspondence and apologies for the delay in responding to you. Kindly note that you have been registered on the I&AP database on behalf of your client. As registered I&APs you will be provided with an opportunities to comment on the Scoping and EIA reports and associated appendices once they become available. Should you have any further comments or queries please feel free to contact EIMS.

Date 2021/03/24 Method Email

Comment

We refer to our email below, and would be grateful if you could confirm receipt thereof.

Response

My sincere apologies for the delay please can you confirm if you have received my correspondence relating to the confirmation of your registration. Should you have any further queries please feel free to contact EIMS.

Date 2021/04/29 Method Email

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Mr Adrian Pole

Comment

Dear Ms. Muthu and Ms. Muthukarapan Please find attached comments on the Tosaco Block 1 Exploration Right draft Scoping Report, submitted on behalf of the Green Connection. We would be most grateful if you could confirm receipt of the Green Connection's comments by return of email.

Date 2021/04/29 Method Email

Comment

2. ROLE OF PASA IN NEMA EIA PROCESS 2. It is noted that the draft Scoping Report (DSR) indicates that Tosaco submitted an application for an exploration right (ER) to the Petroleum Agency South Africa (PASA) dated 5 May 2020, and that Tosaco subsequently submitted an application for environmental authorisation to PASA on 17 March 2020 . 3. The DSR indicates further that a full Scoping and Environmental Impact Assessment (S&EIA) application is being undertaken to accompany the ER application for NEMA EIA Listing Notice activity 18 (namely an activity including the operation of that activity that requires an exploration right as contemplated in s79 of the MPRDA). 4. In terms of the NEMA Environmental Impact Assessment (EIA) Regulations Listing Notice 2 of 2014, the Minister responsible for Mineral Resources is identified as the competent authority where the listed activity is or is directly related to (among other things) exploration of a petroleum resource. Section 42B of NEMA provides that the Minister responsible for Mineral Resources may in writing delegate a function entrusted to him/her in terms of the Act to the Director-General of the Department of Minerals and Energy; or any officer in the department of Minerals and Energy. It is relevant to note that s42B of NEMA does not empower the Minister responsible for Mineral Resources to delegate a function to state-owned agencies or companies, such as PASA. It is also relevant to note that s42B of NEMA also does not include a power to subdelegate. 5. On 18 June 2004, the then Minister of Minerals and Energy designated PASA to perform the functions set out in Chapter 6 of the Minerals & Petroleum Resources Development Act (MPRDA). It is relevant to note that the Minister was exercising powers conferred in terms of section 70 of the MPRDA. Section 71 of the MPRDA sets out the functions of PASA as the designated agency, which include (among other things) that the designated agency must: review and make recommendations to the Minister with regard to the acceptance of environmental reports and the conditions of the environmental authorisations and amendments thereto. (emphasis added). 6. It is pointed out that these functions do not extend to PASA accepting or processing NEMA EIA applications. 7. EIMS is requested to clearly state the role and functions being performed by PASA in this NEMA EIA process.

Response

Dear Mr Pole, Thank you for your correspondence. Kindly find attached EIMS response document to comments received. Should you have any queries please feel free to contact EIMS.

Response

B2-7 B. ROLE OF PASA IN NEMA EIA PROCESS 2. It is noted that the draft Scoping Report (DSR) indicates that Tosaco submitted an application for an exploration right (ER) to the Petroleum Agency South Africa (PASA) dated 5 May 2020, and that Tosaco subsequently submitted an application for environmental authorisation to PASA on 17 March 2020 . 3. The DSR indicates further that a full Scoping and Environmental Impact Assessment (S&EIA) application is being undertaken to accompany the ER application for NEMA EIA Listing Notice activity 18 (namely an activity including the operation of that activity that requires an exploration right as contemplated in s79 of the MPRDA). 4. In terms of the NEMA Environmental Impact Assessment (EIA) Regulations Listing Notice 2 of 2014, the Minister responsible for Mineral Resources is identified as the competent authority where the listed activity is or is directly related to (among other things) exploration of a petroleum resource. Section 42B of NEMA provides that the Minister responsible for Mineral Resources may in writing delegate a function entrusted to him/her in terms of the Act to the Director-General of the Department of Minerals and Energy; or any officer in the department of Minerals and Energy. It is relevant to note that s42B of NEMA does not empower the Minister responsible for Mineral Resources to delegate a function to state-owned agencies or companies, such as PASA. It is also relevant to note that s42B of NEMA also does not include a power to subdelegate. 5. On 18 June 2004, the then Minister of Minerals and Energy designated PASA to perform the functions set out in Chapter 6 of the Minerals & Petroleum Resources Development Act (MPRDA). It is relevant to note that the Minister was exercising powers conferred in terms of section 70 of the MPRDA. Section 71 of the MPRDA sets out the functions of PASA as the designated agency, which include (among other things) that the designated agency must: review and make recommendations to the Minister with regard to the acceptance of environmental reports and the conditions of the environmental authorisations and amendments thereto. (emphasis added). 6. It is pointed out that these functions do not extend to PASA accepting or processing NEMA EIA applications. 7. EIMS is requested to clearly state the role and functions being performed by PASA in this NEMA EIA process. Thank you for your comments. It is our understanding that, Section 70 of the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002, as amended, MPRDA), the Minister of Mineral Resources in June 2004,

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Mr Adrian Pole

designated various duties pertaining to petroleum exploration and production to the Petroleum Agency of South Africa (PASA). This includes the receipt of applications for different types of permits and rights, some of which require environmental authorisations. Section 71(i) of the MPRDA provides that the designated agency must review and make recommendations to the Minister with regards to the acceptance of environmental reports and the conditions of environmental authorisations and amendments thereto. The application was prepared on the Department of Mineral Resources and Energy Application template. The DMR SAMRAD system does not cater for the submissions of Exploration Rights and this function is provided through the PASA's online portal which states that "Petroleum Agency SA (the Agency) has implemented an Online Application Portal for the submission of applications for permits/rights, and also, for lodging environmental authorization applications." At the time of submission of the application for Environmental Authorisation (EA), the PASA Online Portal mentioned the following: "Kindly note that the Online Portal is temporarily unavailable, and in the meantime manual application processes either at the Agency's offices or through registered mail to the Agency are to be followed for lodging an application." It is further noted that the Scoping Report has been submitted to the PASA for consideration and review. PASA will then make a recommendation on the acceptance or rejection of the Final Scoping Report (FSR) to the Department of Mineral Resources and Energy (DMRE), who will make the final decision, as part of the application for Environmental Authorisation (EA) in terms of Chapter 5 of the National Environmental Act (Act No. 107 of 1998, NEMA), as amended.

Date 2021/04/29 Method Email

Comment

1. INTRODUCTION 1. These comments are submitted on behalf of the Green Connection, a registered non-governmental organisation, that believes that economic growth and development, improvement of socio-economic status and conservation of natural resources can only take place within a commonly understood framework of sustainable development. Green Connection aims to provide practical support to both the government and non-governmental/civil society sectors, which are an integral part of sustainable development.

Response

Comment noted. The Green Connection has been registered as an I&AP for this application.

Date 2021/04/29 Method Email

Comment

3. NO EXPLORATION DRILLING INCLUDED IN APPLICATION FOR AUTHORISATION Background 8. It is noted that previous investigations and exploration activities have been undertaken within Block 1 in the past, firstly by PetroSA (who obtained an ER in 2008), and subsequently by Cairn South Africa (Pty) Ltd. An environmental management programme (EMPR) and Addendum

Response

Thank you for your comment. Comment noted.

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Mr Adrian Pole

Report are indicated as having been completed and approved for the undertaking of seismic surveys and exploration drilling of 4 to 6 wells (it is assumed this relates to the PetroSA ER). The DSR indicates further that exploration drilling also received environmental authorisation under NEMA. It is unclear whether this relates to PetroSA, but a DSR prepared on behalf of Cairn in 2014 indicates that PetroSA's proposed exploration drilling received environmental authorisation in terms of NEMA. It is not known whether Cairn obtained environmental authorisation. 9. It is noted further that Tosaco was granted a Technical Co-Operation Permit (TCP) under the MPRDA to conduct desktop geotechnical review and studies for Block 1, and that the DSR indicates that a number of oil and gas plays and features were identified. The inner graben rift basin play in particular is indicated as having provided sufficient evidence to warrant the interest to convert the TCP into an ER. Gas potential is indicated as being greatest on the shelf, and oil potential greatest beyond the shelf. 10. Tosaco has designed a 3D seismic survey to specifically target the inner graben syn-rift basin to better define and outline these grabens in order to better understand the internal structure of possible reservoirs, traps, fault structures and possible sediment input points. 11. The DSR states that Tosaco is proposing to undertake the reprocessing of approximately 5000km of existing seismic lines taken previously in Block 1, as well as approximately 750 km² of 3D seismic data previously undertaken. Additional 3D seismic surveys may be conducted over an area of approximately 1340 km² should the analysis of the existing data indicate that this will be beneficial, and would take about 4 months to complete.

Date 2021/04/29 Method Email

Comment

4. Exploration drilling excluded 12. It is noted that the proposed seismic survey programme comprises of 2D and 3D applications/acquisitions, and that 'the current programme does not include any provision for exploration drilling'. 13. Section 1 of the MPRDA defines an 'exploration operation' as meaning: The re-processing of existing seismic data, acquisition and processing of new seismic data or any other related activity to define a trap to be tested by drilling, logging and testing, including extended well testing, of a well with the intention of locating a discovery. Within the context of this definition, exploration necessarily includes the re-processing of existing seismic data, acquisition and processing of new seismic data or any other related activity to define a trap to be tested by drilling, logging and testing, including extended well testing, of a well with the intention of locating a discovery. 14. Given that Tosaco's 'current programme' does not include any provision for exploration drilling, it is unclear how or when Tosaco intends to define a trap to be tested by (among other things) drilling of a well with the intention of locating a discovery. 15. In addition, Tosaco's application under the MPRDA for an ER is not included in the EIA document set, nor is it available on PASA's website.

Response

Thank you for your comment. It is acknowledged that the definition of exploration operation does refer to the definition of a trap to be tested by drilling, of a well with the intention of locating a discovery. However, at this stage, it is understood that the intention is to first identify, through the re-processing of existing seismic data, acquisition and processing of new seismic data, whether there would be any merit in conducting further exploration activities, which would then include testing by drilling. As such, it is understood that there is currently no concrete intention to conduct such drilling. EIMS is conducting the impact assessment on the basis of the activities proposed by the applicant. It is our understanding that should Tosaco wish to extend their exploration activities to include drilling or other invasive exploration works which are not addressed in the current application, there would be a consequent need to apply for the relevant permissions. These would include a formal application to amend the approved Exploration Works Programme (EWP) in accordance with Section 102 of the MPRDA as well as either a new Environmental Authorisation or an amendment to the issued EA and approved EMPR (should such be issued). The impacts of such proposed activities would consequently require specific

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Mr Adrian Pole

A notice under section 10 of the MPRDA has been published on PASA's website, but does not include any information regarding the scope of the ER applied for (and particularly whether the drilling of exploration wells has also been excluded from the ER application). 16. In light of the above, EIMS is requested to: - Provide details of Tosaco's ER application under the MPRDA to PASA in the final DSR and/or draft environmental impact assessment report (EIAR); and - State clearly in the final DSR and/or draft EIAR what Tosaco's intentions are with regard to the future drilling and testing of exploration and/or appraisal wells. If Tosaco does intend to drill and test any such wells, EIMS is further requested to indicate what the rationale is for not including drilling and testing of exploration and/or appraisal wells in this current EIA application, and what process Tosaco intends to follow in order to obtain NEMA environmental authorisation for same. 17. Assuming that Tosaco intends in the future to drill and test exploration wells with the intention of locating a discovery, the Green Connection submits that this exploration EIA should have sought authorisation for same. Applying for authorisation in a piecemeal fashion is potentially irregular as it prevents the competent authority from assessing (and I&APs from commenting on) the full scope of potential impacts, including cumulative impacts, of the planned exploration operation (such as the potential environmental and socio-economic impacts of a catastrophic oil spill arising from a wellhead failure or blowout).

assessment and public consultation prior to approval. It is in our view premature to assess the likely impacts of further invasive exploration activities or production activities as the extent, duration, location, and magnitude applicable to these activities are unknown at this stage. There is provision in law for these activities to be assessed on their merits as and when they are proposed. Please refer to table 4 of the Scoping Report for the activities included in the EWP.

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Comment

5. NEED AND DESIRABILITY 18. The NEMA EIA Regulations stipulate that a scoping report must include a motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location. 19. With regard to need and desirability, a distinction is drawn between the 'general purpose and requirements' of the proposed activity and 'need and desirability'. The 2017 Guideline on Need and Desirability states as follows: In order to properly interpret the EIA Regulations' requirement to consider "need and desirability", it is necessary to turn to the principles contained in NEMA, which serve as a guide for the interpretation, administration and implementation of NEMA and the EIA Regulations. With regard to the issue of "need", it is important to note that this "need" is not the same as the "general purpose and requirements" of the activity. While the "general purpose and requirements" of the activity might to some extent relate to the specific requirements, intentions and reasons that the applicant has for proposing the specific activity, the "need" relates to the interests and needs of the broader public. ... The consideration of "need and desirability" in EIA decision-making therefore requires the consideration of the strategic context of the development proposal along with the broader societal needs and the public interest. The government decision-makers, together with the environmental assessment practitioners and planners, are therefore accountable to the public and must serve their social, economic and

Response

Thank you for your comment. Further to Item 20 of your comment letter, and as pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the need and desirability of such activities given that the specific details of these potential future activities are not known. It should further be noted that the life cycle of the current project is limited to the exploration activities as stated in the DSR and this will be the focus of the Scoping and EIA Process. It is in our view premature to assess the likely impacts of further invasive exploration activities or production activities as the extent, duration, location, and magnitude applicable to these activities are unknown at this stage. There is provision in law for these activities to be assessed on their merits as and when they are proposed.

Mr Adrian Pole

ecological needs equitably. Ultimately development must not exceed ecological limits in order to secure ecological integrity, while the proposed actions of individuals must be measured against the short-term and long-term public interest in order to promote justifiable social and economic development – i.e. ensuring the simultaneous achievement of the triple bottom-line. Considering the merits of a specific application in terms of the need and desirability considerations, it must be decided which alternatives represent the “most practicable environmental option”, which in terms of the definition in NEMA and the purpose of the EIA Regulations are that option that provides the most benefit and causes the least damage to the environment as a whole, at a cost acceptable to society, in the long-term as well as in the short-term. (emphasis added) 20. Given that exploration operations are intended to define traps to be tested by drilling of a well with the intention of locating a discovery (of hydrocarbons below the seabed), and which in turn would likely lead to production operations should commercially exploitable hydrocarbon resources be discovered, the Green Connection is of the view that addressing the need and desirability within the context of ecologically sustainable development requires at the very least an initial assessment and consideration of the environmental health and safety consequences of the project, including an assessment of need and desirability, throughout its life cycle (rather than ring-fencing the assessment of impacts and the consideration of need and desirability to the reprocessing of seismic data and acquisition of new seismic data). This will necessarily entail a consideration of (among other things): - Climate change impacts associated with exploration, production and use of hydrocarbons discovered in Block 1, including: its impact on South Africa’s ability to meet its international responsibilities to address climate change; whether the proposed project promotes increased dependency on non-renewable hydrocarbon resources or reduces such resource dependency; and whether the exploration for an subsequent exploration of new hydrocarbon resources will impact positively or negatively on future generations of South Africans; - Ecological and socio-economic impacts associated with a major oil spill (such as an uncontrolled wellhead blowout), including potential impacts on small-scale fishers and coastal communities that depend on the ocean for their livelihoods; and - Critical Biodiversity Areas and Ecological and Biologically Significant Areas located within Block 1 and within the proposed seismic survey area where ‘petroleum production is considered incompatible’. 21. It is noted that EIMS limits the consideration of need and desirability to the exploration for oil and gas (excluding drilling), indicates that the project ‘will not, at this stage, involve the use of natural resources identified as part of the proposed exploration project’, but also acknowledges that ‘[t]he proposed project aims to identify oil and gas resources to be used in the energy production and/or processing or manufacturing of materials’. 22. It is also noted that in relation to the question of whether a risk-averse and cautious approach was applied to socio-economic impacts, the DSR indicates that ‘[t]he level of risk is low as the project is not expected to have far reaching negative impacts on socio-economic conditions. Since the exploration activities will not include any drilling at this stage, a

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risk averse and cautious approach had been implemented to limit the impact on the surrounding environment'. 23. NEMA section 2(4)(a)(vii) stipulates that sustainable development requires the consideration of all relevant factors, including that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions. It is submitted that ring-fencing the EIA application to exclude reasonably foreseeable future impacts (i.e. climate change impacts or catastrophic oil spill impacts that could arise from future hydrocarbon exploration drilling and production activities should commercially exploitable resources be discovered) is not a rational application of the 'risk-averse and cautious approach' required by NEMA in relation to need and desirability. The approach taken in the DSR artificially removes potentially significant life cycle impacts from consideration in the EIA, notwithstanding that the proposed exploration is aimed at identifying oil and gas resources to be used in (among other things) energy production, and notwithstanding that that future exploration drilling and ultimately production activities are likely to follow.

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6. NO GO OPTION 24. With regard to the 'no go alternative', the DSR states as follows: The no go alternative would imply that no exploration activities are undertaken. As a result, the opportunity to identify potential oil and gas resources within the Block 1 and proposed 3D survey area. This will negate the potential negative and positive impacts associated with the proposed exploration activities. (wording as appears in DSR) 25. The Green Connection is of the view that the potential ecological and socio-economic risks associated with likely future exploration drilling and petroleum production activities (having regard to the global climate emergency and the potentially devastating impacts of a catastrophic oil spill) require a proper assessment and consideration of the "no go option". This assessment should necessarily include a consideration of alternative means to generate energy, and in particular renewable energy alternatives that do not pose a significant inter-generational ecological and socio-economic risk. It should also include a consideration of the benefits of the "no go option". These benefits include avoidance of the risk of significant ecological pollution should a catastrophic oil spill occur during future exploration and production operations (and would also avoid the associated risk to communities and small-scale fishers who depend on the ocean for their livelihoods), as well as the avoidance of additional greenhouse gas (GHG) impacts associated with extracting, processing and using any hydrocarbons discovered.

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Response

Thank you for your comment. As pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to accurately assess the risks associated with these activities, given that the specific details of these potential future activities are not known. While it is acknowledged that the risks mentioned would need assessment, such assessment falls outside of the scope of the current application and would need to be assessed in detail during subsequent Scoping and EIA processes, should drilling or production be proposed. The significance of the likely potential ecological and socio-economic risks or impacts identified and assessed in the Scoping Report indicate that all impacts can be reduced to a level of low to medium significance. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. The application for exploration does not include the generation of energy and as such alternative means of energy generation have not been assessed.

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Comment

7. NO CLIMATE CHANGE ASSESSMENT 26. It is noted that the DSR does not address climate change impacts associated with the exploration for, production of and ultimately end-use of oil and gas in Block 1. 27. Regarding atmospheric emissions, the DSR states that no further impact assessment is required in the EIA phase. 28. Having regard to the global Climate Emergency and South Africa's international commitment to 'working with others to ensure temperature increases are kept well below 2°C above pre-industrial levels, which could include a further revision of the temperature goal to below 1.5°C in light of emerging science' by reducing greenhouse gas (GHG) emissions, Tosaco's proposed exploration for offshore oil and gas resources would, if additional commercially viable resources are found and developed to production phase, inevitably add to the South Africa's overall GHG emissions (South Africa's energy sector currently contributes an estimated 84% percent to the country's overall GHG emissions). 29. As a reasonably foreseeable future impact that may become more significant when added to the existing and reasonably foreseeable GHG impacts arising from similar offshore oil and gas exploration and production activities in South Africa's exclusive economic zone, it is submitted that the cumulative impacts of such GHG emissions need to be identified in the DSR, and the impact thereof assessed in the next phase of the EIA process. 30. Such an approach would be consistent with the NEMA environmental management principle set out in section 2(4)(e), which stipulates that responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle. 31. The Green Connection submits further that the EIA should address the implications of climate change on oceans. The Intergovernmental Panel on Climate Change has identified that coastal systems will experience climate change-related impacts due to sea level rise and associated storm swells. In addition, there is medium agreement that the Benguela system will experience changes in upwelling intensity as a result of climate change. The Green Connection submits that the EIA should therefore include a study on the potential impacts that changes in ocean currents, increased severity of storms etc. could have on future exploration and production drilling activities.

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8. SPECIALIST STUDIES (SEISMIC SURVEYS) 32. The DSR indicates that specialist studies are being undertaken to address the key impacts that require further investigation, namely a Marine Ecological Impact Assessment and a Fisheries Impact Assessment. The DSR indicates further that these studies 'involved the gathering of data relevant to identifying and assessing preliminary environmental impacts that may occur as a result of the proposed project'. 33. A

Response

Thank you for your comment. As pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to accurately assess the risks associated with these activities, given that the specific details of these potential future activities are not known. On the basis of the exploration activities currently proposed it is unlikely that there will be significant climate change impacts. While it is acknowledged that the risks mentioned would need assessment, such assessment falls outside of the scope of the current application and would need to be assessed in detail during subsequent Scoping and EIA processes, should drilling or production be proposed. The environmental consequences applicable to the planned exploration activities have been identified and assessed in the Scoping Report. There is provision in law for future activities (including exploration drilling and production) to be assessed and decided upon, on their merits as and when they are proposed, and prior to commencement of such.

Response

Thank you for your comments. Further to comment 35, both EIMS and the specialists appointed for this Scoping and EIA process are independent and satisfy the requirements of independence as specified in the EIA Regulations, 2014, as amended. As such, it is our opinion that an independent reviewer will not add any additional value at this stage. Furthermore, the terms of reference for each specialist is detailed in their respective reports which have been made available to

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Marine Faunal Specialist Assessment (prepared by Pisces Environmental Services (Pty) Limited) and a Specialist Fisheries Assessment (prepared by CapMarine) have already been conducted, and are attached to the DSR. 34. These specialist reports seem to have already concluded that the proposed seismic survey will not impact significantly on marine fauna and fisheries (including small-scale fisheries). For example: - The Marine Faunal Specialist Assessment rates the significance of preliminary impacts identified as negligible, very low or low. It states further that if all environmental guidelines, and appropriate mitigation measures recommended are implemented, 'there is no reason why the proposed seismic survey should not proceed'. Various and detailed recommendations to mitigate potential impacts are also included in the Marine Faunal Specialist Assessment; and - The Specialist Fisheries Assessment includes a section on small-scale fishers, and states that the small-scale fisheries rights cover the nearshore area (i.e. within close proximity of the shoreline) and are unlikely to extend more than 3 nautical miles from the coast. The report states that 'There is no impact of temporary exclusion of fishing operations expected, as the proposed seismic acquisition area lies beyond the expected range of the linefish and rock lobster catch areas'. 35. Given that the specialist reports seem to have already concluded at this DSR stage that the proposed seismic survey will not impact significantly on marine fauna and fisheries the Green Connection submits that a credible peer review mechanism should be established as part of the EIA process for the specialist reports and impact assessments. The Green Connection submits further that the terms of reference for each specialist study and impact assessment should be clearly stated, together with the details of each specialist and suggested peer reviewers. The Green Connection believes that I&APs should be afforded a reasonable opportunity to comment on the terms of reference and proposed peer reviewers.

registered I&APs for comment. The conclusions and significance ratings contained in the specialist reports are in line with other similar specialist studies undertaken for seismic surveys over the past 10 years.

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Comment

9. Notwithstanding the above, it is relevant to note that the DSR acknowledges that insufficient information is available in some instances and that gaps in knowledge exist. For example, the DSR and/or Marine Ecological Impact Assessment indicate that: - A 2018 National Biodiversity Assessment for the marine environment points out that very few national IUCN Red List assessments have been conducted for marine invertebrate species to date owing to inadequate taxonomic knowledge, limited distribution data, a lack of systematic surveys and limited capacity to advance species red listing for these groups. - South Africa's seamounts and their associated benthic communities have not been extensively sampled by either geologists or biologists. - 33 species of whales and dolphins are known to occur in these waters, including the blue whale (critically endangered) and fin and sei whales (endangered). 17 species are listed as data deficient. 'The offshore areas have been particularly poorly studied with almost all

Response

Thank you for your comments. Comments noted. As per the requirements in the EIA regulations, assumptions made, any uncertainties or gaps in knowledge must be stipulated in the specialist reports. Based on discussions with the relevant specialists and with due consideration of the extent, duration, and magnitude of the proposed exploration activities it is understood that there is adequate information to be able to make a reasonable assessment of the likely impacts .

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available information from deeper waters (>200m) arising from historic whaling records prior to 1970. Current information on the distribution, population sizes and trend of most cetacean species occurring on the west coast of southern African is lacking. Information on smaller cetaceans in deeper waters is particularly poor and the precautionary principle must be used when considering possible encounters with cetaceans in this area'. While it is claimed that increasing numbers of southern right and humpback whales suggests that seismic surveys conducted over the past 17 years have not negatively influenced the distribution patterns of these two migratory 36. Notwithstanding the above, it is relevant to note that the DSR acknowledges that insufficient information is available in some instances and that gaps in knowledge exist. For example, the DSR and/or Marine Ecological Impact Assessment indicate that: - A 2018 National Biodiversity Assessment for the marine environment points out that very few national IUCN Red List assessments have been conducted for marine invertebrate species to date owing to inadequate taxonomic knowledge, limited distribution data, a lack of systematic surveys and limited capacity to advance species red listing for these groups. - South Africa's seamounts and their associated benthic communities have not been extensively sampled by either geologists or biologists. - 33 species of whales and dolphins are known to occur in these waters, including the blue whale (critically endangered) and fin and sein whales (endangered). 17 species are listed as data deficient. 'The offshore areas have been particularly poorly studied with almost all available information from deeper waters (>200m) arising from historic whaling records prior to 1970. Current information on the distribution, population sizes and trend of most cetacean species occurring on the west coast of southern African is lacking. Information on smaller cetaceans in deeper waters is particularly poor and the precautionary principle must be used when considering possible encounters with cetaceans in this area'. While it is claimed that increasing numbers of southern right and humpback whales suggests that seismic surveys conducted over the past 17 years have not negatively influenced the distribution patterns of these two migratory species at least, '[i]nformation on the population trends of resident species of baleen and toothed whales is unfortunately lacking, and the potential effects of seismic surveys on such populations remains unknown'. 37. It is also relevant to note that Block 1 and/or the proposed seismic survey area intersect Marine Protected Areas (MPAs), provide habitat or migratory routes to a number of critically endangered, endangered or threatened species, and also include Ecologically or Biologically Significant Areas (EBSAs), Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) and Vulnerable Marine Ecosystems (VMEs). For example, the DSR indicates that: - Seamounts provide an important habitat for commercial deep water fish stocks such as Patagonian toothfish, which aggregate around these features either for spawning or feeding. 'Consequently, the fauna of seamounts is usually highly unique and may have a limited distribution restricted to a single geographic region, a seamount chain or even a single seamount location. As a result of conservative life histories... and sensitivity to changes in

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environmental conditions, such biological communities have been identified as Vulnerable Marine Ecosystems (VMEs). They are recognised as being particularly sensitive to anthropogenic disturbance (primarily deep-water trawl fisheries and mining), and once damaged rare very slow to recover, or may never recover'. - The fish most likely to be encountered on the shelf and in the offshore waters of Block 1 are large migratory pelagic species, such as tuna, billfish and sharks, 'many of which are considered threatened by the International Union for the Conservation of Nature (IUCN), primarily due to overfishing'. - Leatherback turtles are the most likely turtle species to be encountered in the offshore waters of west South Africa. Leatherback turtles are listed as 'critically endangered' by the IUCN, and 'are in the highest categories in terms of need for conservation in CITES... and CMS'. The 2017 South African lists of Threatened and Endangered Species (TOPS) similarly list the species as 'critically endangered', while the National Assessment listed them as 'endangered'. 'South Africa is thus committed to conserve these species at an international level'. - A number of conservation areas and a MPA exist along the coastline of the Western Cape. The DSR states that 'the only conservation area in the vicinity of the project area in which restrictions apply is the McDougall's Bay rock lobster sanctuary near Port Nolloth... The Orange River Mouth wetland located at the northern corner of Block 1 provides an important habitat for large numbers of a great diversity of wetland birds and is listed as a Global Important Bird Area (IBA).... The area was designated as a Ramsar site in June 1991, and processes are underway to declare a jointly-managed transboundary Ramsar reserve. Various Marine IBAs have also been proposed in South African and Namibian territorial waters, with a candidate trans-boundary marine IBA suggested off the Orange River mouth.... Block 1 lies south of the Atlantic Southeast 21 marine IBA and overlaps with the candidate Orange River Mouth Wetland IBA.' - Block 1 overlaps with the Orange Shelf Edge and Namaqua Fossil Forest MPA. According to figure 74, the proposed 3D seismic survey area overlaps part of the Namaqua Fossil Forest EBSA, recognised as globally important and declared as an EBSA in 2014. - A number of 'endangered' and 'vulnerable' ecosystems types are currently not well protected. 'Currently... most of the Southern Benguela Sandy Shelf Edge and Southeast Atlantic Upper- and Mid-Slope are poorly protected... whereas the Southeast Atlantic Lower Slope receives no protection at all'. - 'As part of a regional Marine Spatial Management and Governance Programme (MARISMA 2014-2020) the Benguela Current Commission (BCC) and its member states have identified a number of EBSAs... with the intention of implementing improved conservation and protection measures within these sites'. 3 trans-boundary EBSA's are shared with Namibia. 'The principal objective of these EBSAs is identification of features of higher ecological value that may require enhanced conservation and management measures. They currently have no legal status'. - Regarding EBSA's, Figure 76 indicates critical biodiversity areas and an ESA in the proposed 3D seismic survey area. The DSR indicates that 'Future activities that may be prohibited in the conservation zone of these EBSAs includes mining construction and operations, although non-destructive or highly localised prospecting activities

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may be conducted in the impact management zone. Block 1 and the proposed 3D survey area overlaps with the southern portion of the Namaqua Fossil forest EBSA biodiversity conservation zone in which non-destructive exploration and destructive localised impacts such as exploration wells will be conditionally permitted, but petroleum production is considered incompatible. It must be noted however, however, that the EBSA Zone boundaries are subject to ongoing revision based on discussions with the National EBSA Working Group. These zones have been incorporated into the most recent iteration of the national Coastal and Marine Critical Biodiversity Area (CBA) Map... released on 26 February 2021 (Figure 76). This indicates that CBA1 and CBA2 regions extend south and offshore of the Namaqua Fossil Forest MPA and across the proposed 3D survey area. CBA 1 indicates irreplaceable or near-irreplaceable sites that are required to meet biodiversity targets with limited, if any, option to meet targets elsewhere, whereas CBA 2 indicates optimal sites that generally can be adjusted to meet targets in other areas. Ecological Support Areas (ESAs) represent EBSAs outside of MPAs and not already selected as CBAs. Sea-use within the CBAs and ESAs reflect those specified by the EBSA biodiversity conservation and management zones described above'. (emphasis added) 38. The Assumptions and Limitations section of the DSR indicates that information gaps with regard to marine ecology include: - Details of the benthic macrofaunal communities and potentially vulnerable species on deep water habitats; and - Current information on the distribution, population sizes and trends of most pelagic seabird, turtle and cetacean species occurring in South African water and the project area in particular. 39. With regard to fisheries, the same section of the DSR indicates that '[t]he effect of seismic sound on the CPUE [catch per unit effort] of fish and invertebrates have been drawn from the findings of international studies. To date there have been no studies focused directly on the species found locally. Although the results from international studies are likely to be representative for local species, current gaps in knowledge on the topic lead to uncertainty when attempting to accurately quantify the potential loss of catch for each type of fishery. Research into the effects of seismic sound on marine fauna is ongoing.'

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Comment

10. In light of the data and information gaps and lack of certainty acknowledged in the DSR, and having regard to the EBSAs, CBAs, ESAs and VMEs located in the proposed seismic survey area, the Green Connection submits that it is appropriate that a risk averse and cautious approach is properly applied that takes into account these limits in current knowledge about the consequences of decisions and actions relating to the proposed 3D seismic surveys. Lack of data and information gaps do not imply a lack of harm. The Green Connection submits that in order to protect the environment for the benefit of current and future generations, a proper

Response

Thank you for your comment. It should be pointed out that the CBAs and EBSAs currently carry no legal status. However, despite this, the specialist has assessed the impacts on the various organism groups and identified mitigation measures that reduce the residual risk of the proposed activities, despite the information gaps. As such, the mitigation measures proposed provide the necessary risk averse and cautious approach.

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application of a risk averse and cautious approach requires that where there are limits in current knowledge about the potential for and significance of impacts of 3D seismic surveys, it is better to err on the side of caution and prevent environmental harm which may become irreversible. Accordingly, the Green Connection is of the view that the proposed 3D seismic surveys should not proceed until sufficient information and knowledge is available. 41. The Green Connection reserves its rights to make further comment on these specialist reports during the comment period for the EIAR phase.

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Comment

11. POLICY AND LEGISLATIVE CONTEXT MPRDA 42. It is noted that the DSR makes reference to an EIA being required '[a]s per Section 22(4)(a) and (b) of the MPRDA'. 43. It is submitted that this reference is incorrect, as section 22 of the MPRDA deals within mining right applications (as opposed to petroleum exploration right applications). 44. Section 79 of the MPRDA deals with petroleum exploration right applications, and section 80(1)(c) stipulates that the Minister (DMRE) must grant an exploration right if the Minister has (among other things) issued an environmental authorisation (defined as having the meaning assigned to in in NEMA).

Response

Thank you for your comment. This section has been updated accordingly.

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Comment

12. NEMA It is noted that the DSR makes reference to NEMA Listing Notice 2 activity 14 as requiring environmental authorisation for activities (including the operation of the activity) which require an exploration right as contemplated in s79 of the MPRDA. 46. It is submitted that this is incorrect. 47. NEMA Listing Notice 2 activity 18 requires environmental authorisation for activities (including the operation of the activity) which require an exploration right as contemplated in s79 of the MPRDA.

Response

Thank you for your comment. This section has been updated accordingly. The application for EA and all other associated documentation makes the correct reference to Activity 18 of Listing Notice 2.

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Comment

13. International Marine Conventions 48. No mention is made of the Benguela Current Convention in section 4.7.3 of the DSR.

Response

Thank you for your comment. This section has been updated accordingly .

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Comment

Response

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14. PUBLIC PARTICIPATION 49. It is noted that while various notices were published in English and Afrikaans, the DSR and specialist reports appear to have only been made available to the public in English. Given that many community members, and small-scale fishers in particular, along the West Coast adjacent to Block 1 are Afrikaans-speaking, the Green Connection submits that an Afrikaans version of these documents should have been made available. It is pointed out that section 2(4)(f) of NEMA stipulates that the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.

Thank you for your comment. EIMS Would like to point out that open days were held during the DSR comment period which afforded the opportunity for local communities to obtain the information in their own language. The presentations done during these open days were conducted in Afrikaans and English. No requests were made during the public consultation process for the provision of documentation in other languages.

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Comment

To whom it may concern As indicated in previously correspondence, I am assisting the Green Connection in preparing comment on Tosaco's EIA application. The draft EIA report (para 6.2, bullet point 6) makes reference to comments submitted by PASA, but these do not clearly appear in Annexure B7. Could you please direct me to where these comments may be found (alternatively email the comment and response to me)? Also, the EIA document set does not include any minutes of meetings or copies of correspondence between the Tosaco/EIMs and PASA and/or the DMRE. Please could you confirm that there are no such minutes or correspondence, alternatively please can you email a copy of same to us. The above information is required to inform the comment to be submitted by the Green Connection.

Response

Dear Adrian, Thank you for your correspondence. Please see our responses to your comments below. The PASA comments are captured under the name of Sinazo Mnyaka on pages 23-24 of Appendix B7. Please find attached the following: 🕒 Minutes of the Pre-Application Meeting held with PASA. 🕒 Acceptance of the Environmental Authorisation Application. 🕒 Acceptance of the Final Scoping Report and Plan of Study for EIA. Should you have any queries or concerns, please do not hesitate to contact EIMS.

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Comment

A. INTRODUCTION 1. These comments are submitted on behalf of the Green Connection, a registered non-governmental organisation, that believes that economic growth and development, improvement of socio-economic status and conservation of natural resources can only take place within a commonly understood framework of sustainable development. Green Connection aims to provide practical support to both the government and non-governmental/civil society sectors, which are an integral part of sustainable development.

Response

Comment Noted.

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Comment

B2. POINT IN LIMINE 1 - ACTIVITY IN RESPECT OF WHICH AUTHORISATION IS APPLIED FOR IS

Response

Thank you for your comment. As mentioned previously, it is acknowledged that the definition of

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NOT AN EXPLORATION OPERATION 2. It is submitted that the activities in respect of which Tosaco seeks environmental authorisation do not fall within National Environmental Management Act (NEMA) Listing Notice 2 activity 18, which requires environmental authorisation for activities (including the operation of the activity) which require an exploration right as contemplated in s79 of the Mineral and Petroleum Resources Development Act3 (MPRDA). 3. Determining whether the proposed activity falls within NEMA Listing Notice 2 activity 18 thus requires a consideration of what activities require an exploration right under s79 of the MPRDA. Section 79 deals with exploration right applications, while section 80 provides that the Minister (DMRE) must grant an exploration right if (among other things) the applicant has the financial resources and technical ability to conducted the proposed exploration operation. 4. Section 1 of the MPRDA defines 'exploration operation' as meaning: The re-processing of existing seismic data, acquisition and processing of new seismic data or any other related activity to define a trap to be tested by drilling, logging and testing, including extended well testing, of a well with the intention of locating a discovery. Within the context of this definition, exploration necessarily includes the re-processing of existing seismic data, acquisition and processing of new seismic data or any other related activity to define a trap to be tested by drilling, logging and testing, including extended well testing, of a well with the intention of locating a discovery. 5. Badenhorst and Mostert point out that the definition [of 'exploration operation']: ...contains four elements. First, it requires activities, including re-processing of existing seismic data, acquisition and processing of new seismic data or other related activities. Second, these activities must be conducted with the purpose of defining a trap. Third, the trap must be tested by drilling, logging and testing (including extended well testing) of a well. Finally, such testing must be conducted with the intention of locating a discovery. 6. The draft EIA report states that Tosaco is proposing to undertake the reprocessing of approximately 5000km of existing seismic lines taken previously in Block 1, as well as approximately 750 km2 of 3D seismic data previously undertaken. Additional 3D seismic surveys may be conducted over an area of approximately 1340 km2 should the analysis of the existing data indicate that this will be beneficial, and would take about 4 months to complete.5 However, 'the current programme does not include any provision for exploration drilling'. 7 Given that Tosaco's 'current programme' does not include any provision for exploration drilling, logging and testing of a well with the intention of locating a discovery, it is submitted that the proposed activity does not constitute an 'exploration operation' as defined in the MPRDA, and as a consequence the activities as proposed by Tosaco do not require an exploration right as contemplated in s79 of the MPRDA. It follows that the activity in respect of which authorisation has been applied for also does not apply. 8. In its response to the Green Connection's comments on the Draft Scoping Report (DSR), EIMS acknowledge that the 'definition of exploration operation does refer to the definition of a trap to be tested by drilling, of a well with the intention of making a discovery'.7 EIMS go on to state that, at this stage, the intention is to first identify whether

exploration operation does refer to the definition of a trap to be tested by drilling, of a well with the intention of locating a discovery. However, at this stage, it is understood that the intention is to first identify, through the re-processing of existing seismic data, acquisition and processing of new seismic data, whether there would be any merit in conducting further exploration activities, which would then include testing by drilling. As such, it is understood that there is currently no concrete intention to conduct such drilling. EIMS is conducting the impact assessment on the basis of the activities proposed by the applicant. It is our understanding that should Tosaco wish to extend their exploration activities to include drilling or other invasive exploration works which are not addressed in the current application, there would be a consequent need to apply for the relevant permissions. These would include a formal application to amend the approved Exploration Works Programme (EWP) in accordance with Section 102 of the MPRDA as well as either a new Environmental Authorisation or an amendment to the issued EA and approved EMPR (should such be issued). These proposed activities do fall within the definition of exploration operation, and will if successful, lead to the definition of potential drill sites, which could then be tested at a later stage. It our understanding that the Competent Authority has reviewed the application for the Exploration Right and the associated Environmental Authorisation (EA) and agreed that these activities constitute exploration operations. Consequently, the associated Scoping and EIA Process was followed for this application.

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there would be any merit in conducting further exploration activities, which would then include drilling. EIMs state that '[a]s such, it is understood that there is currently no concrete intention to conduct such drilling. EIMs is conducting the impact assessment on the basis of the activities proposed by the applicant. 9. This explanation does not address the issue raised by the Green Connection, namely that the activities in respect of which environmental authorisation has been applied for do not constitute 'exploration operations' given that proposed re-processing of existing seismic data and acquisition and processing of new seismic data is not being carried out to define a trap to be tested by drilling, logging and testing, including extended well testing, of a well with the intention of locating a discovery: Tosaco currently has no intention of conducting exploration drilling. 10. In light of the above, it is submitted that the proposed activities that Tosaco seeks environmental authorisation for do not trigger EIA Listing Notice 2 activity 18, and that as a consequence environmental authorisation should be refused.

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C. POINT IN LIMINE 2: EIA APPLICATION PROCESS IRREGULAR 11. It is submitted that the EIA process has been tainted by an irregular pre-application meeting between the Petroleum Agency of South Africa (PASA) and the EIA consultants, by an irregular decision made by PASA at this meeting regarding specialist studies required, by the environmental authorisation application being irregularly submitted to PASA and not the competent authority, and by specialist assessments being conducted prior to the EIA phase. These irregularities, which we detail below, are prejudicial to I&APs and violate the right of I&APs to procedurally fair decision-making. 12. Pre-application meeting with PASA irregular Minutes of a PASA Pre-Application Meeting held on 3 Feb 2021 show that the meeting was attended by three representatives of PASA and two representatives of EIMS, and that the minutes were also distributed to Tosaco's Lawrence Mulaudzi. 13. No representative of the competent authority (i.e. the DMRE) was present at this meeting. 14. In terms of the NEMA Environmental Impact Assessment (EIA) Regulations,⁸ a competent authority (i.e. the DMRE in this instance) is empowered to advise or instruct the proponent or applicant of the nature and extent of any of the processes that may or must be followed or decision support tools that must be used in order to comply with NEMA and the EIA Regulations.⁹ 15. No provision is made in the EIA Regulations for a pre-application meeting to be held with PASA. This irregularity is compounded by the fact that PASA is an agency designated by the Minister to (among other things) promote offshore exploration for and production of petroleum. As a result, this pre-application meeting was held ultra vires the enabling provisions of NEMA and the EIA Regulations applicable at the time, with an agency with the statutory mandate to promote offshore exploration for and production of petroleum.

Response

Thank you for your comments. It is our understanding that, Section 70 of the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002, as amended, MPRDA), the Minister of Mineral Resources in June 2004, designated various duties pertaining to petroleum exploration and production to the Petroleum Agency of South Africa (PASA). This includes the receipt of applications for different types of permits and rights, some of which require environmental authorisations. Section 71(i) of the MPRDA provides that the designated agency must review and make recommendations to the Minister with regards to the acceptance of environmental reports and the conditions of environmental authorisations and amendments thereto. In light of the above, EIMS is of the opinion that it was not irregular to undertake a meeting of this nature with the agency that has been assigned certain administrative functions in terms of the MPRDA.

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C. 16. Decision on sufficiency of expert reports irregular Importantly, the minutes of this pre-application meeting show that PASA made an important decision regarding the nature and extent of the EIA process to be followed: 4.3 It was confirmed that for the assessment of the contingent 3D seismic survey activities, EIMS proposed that a marine ecology and fisheries assessment be undertaken to assess the impacts of the proposed seismic activities within the block. PN [Phuti Seanego of PASA] confirmed that these activities would be sufficient for the assessment of the proposed activities considering that no drilling is proposed. 17. It is submitted that PASA was acting ultra vires the empowering provisions of NEMA and the EIA Regulations by making this decision regarding what specialist studies should be undertaken. Insofar as this decision may be considered advice or an instruction regarding the nature and extent of the EIA process to be followed, it is the DMRE as the competent authority that is empowered to make this decision (and not PASA).11 As a consequence of this unlawful decision, the specialist studies were limited to the two specialist studies proposed by EIMs, with no opportunity given to I&APs to comment on or influence this decision.

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C. 18. EIA Application to PASA irregular According to the DSR and draft EIA Report, Tosaco submitted an application for environmental authorisation to PASA on 17 March 2021.12 For the reasons set out below, it is submitted that the submission of the environmental authorisation application to PASA was ultra vires the enabling provisions of NEMA and the EIA Regulations applicable at the time the application was made. 19. In terms of the EIA Regulations applicable at the time, an application for an environmental authorisation must be made to the competent authority referred to in regulation 5. The EIA Regulations provide further that if the Minister responsible for mineral resources has delegated any powers or duties of a competent authority in relation to an application, the application must be submitted to the person or authority to whom the powers had been delegated, and that if the Minister responsible for mineral resources is the competent authority in respect of an application, the application must be submitted to the relevant office of the Department responsible for mineral resources as identified by that Department. 20. In terms of the Listing Notice 2 of 2014, the Minister responsible for mineral resources was identified as the competent authority where the listed activity is or is directly related to (among other things) exploration of a petroleum resource. Section 42B of NEMA provides that the Minister responsible for mineral resources may in writing delegate a function entrusted to him/her in terms of the Act to the Director-General of

Response

Thank you for your comments. EIMS is of the opinion that it was not irregular to consult with the agency that has been assigned certain administrative functions in terms of the MPRDA and the processing of EA Applications. It should further be noted that PASA or the DMRE were not necessarily bound by the initial proposal for Marine Ecology and Fisheries assessments due to the fact that there was a further opportunity to request that additional studies be conducted based subsequent to the review of the Plan of Study for EIA, which would have been informed by the content of the Scoping Report. I&AP's were provided with opportunity to comment on the Scoping Report and Plan of Study for EIA, which include the proposed specialist studies. All comments received from I&AP's during this process were considered in the process.

Response

Thank you for your comments. It is our understanding that, Section 70 of the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002, as amended, MPRDA), the Minister of Mineral Resources in June 2004, designated various duties pertaining to petroleum exploration and production to the Petroleum Agency of South Africa (PASA). This includes the receipt of applications for different types of permits and rights, some of which require environmental authorisations. Section 71(i) of the MPRDA provides that the designated agency must review and make recommendations to the Minister with regards to the acceptance of environmental reports and the conditions of environmental authorisations and amendments thereto. The application was prepared on the Department of Mineral Resources and Energy Application template. The DMR SAMRAD system does not cater for the submissions of Exploration Rights and this function is provided through the PASA's online portal which states that "Petroleum Agency SA (the Agency) has implemented an Online Application Portal for the submission of applications for permits/rights, and also, for lodging environmental authorization applications." At the time of submission of the application for Environmental Authorisation (EA), the PASA Online Portal mentioned the following: "Kindly note that the Online Portal is temporarily unavailable, and in the meantime manual application processes either at the Agency's offices or through registered mail to the Agency are to be followed for lodging an application." It is further noted that the EIA Report

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the Department of Minerals and Energy; or any officer in the department of Minerals and Energy. It is relevant to note that s42B of NEMA does not empower the Minister responsible for Mineral Resources to delegate a function to state-owned agencies or companies, such as PASA. It is also relevant to note that s42B of NEMA also does not include a power to subdelegate. At the time the application was made by Tosaco, PASA was not acting under any lawful delegation by the Minister. Accordingly, it was irregular and procedurally unfair for the application to have been made to PASA. 21. It is relevant to note that the EIA Regulations were subsequently amended to make provision for the submission of environmental authorisation applications to the designated agency (PASA) where such applications relate to petroleum resources. However, this amendment was not in force at the time of the application (the amendment took effect on the date of publication of the amendment, namely 11 June 2021, and applies to applications submitted on or after that date). The fact that this provision required an amendment to the EIA Regulations clearly supports the Green Connection's submission that Tosaco's environmental authorisation application was improperly and irregularly submitted to PASA on 17 March 2021 (i.e. was ultra vires the enabling provisions of NEMA and the EIA Regulations applicable at the time, which continue to apply to the application in terms of the transitional provisions contained in the amendment Notice).

will be submitted to the PASA for consideration and review. PASA will then make a recommendation on the acceptance or rejection of the Final EIA Report to the Department of Mineral Resources and Energy (DMRE), who will make the final decision, as part of the application for EA in terms of Chapter 5 of the National Environmental Act (Act No. 107 of 1998, NEMA), as amended. In light of the above, EIMS is of the opinion that it was not irregular to submit the application to the agency that has been assigned certain administrative functions in terms of the MPRDA.

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C. 22. Conducting specialist assessments prior to EIA phase irregular In addition to an unlawful decision having been made in the pre-application meeting held between PASA and EIMS regarding what specialists studies were to be undertaken in the EIA, these studies were irregularly conducted prior to the EIA phase of the environmental authorisation process, effectively preventing I&APs from commenting on the specialists studies to be undertaken, the aspects to be assessed by specialists, and the proposed method for assessing all aspects to be assessed by specialists. 23. With regard to Scoping and Environmental Impact Reporting (S&EIR) processes: - The EIA Regulations do not make provision for conducting specialist studies during the scoping phase. A scoping report must contain all the information set out in Appendix 2 to the EIA Regulations. Appendix 2 indicates that a scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must (among other things) include a plan of study for the environmental impact assessment process to be undertaken, including aspects to be assessed by specialists, and a description of the proposed method for assessing the environmental aspects including all aspects to be assessed by specialists. It is submitted that the EIA Regulations read with Appendix 2 clearly do not envisage

Response

Thank you for your comments. EIMS commissioned the specialist studies prior to the EIA Phase, since it was determined at an early stage that the EIA would need to investigate these those specific aspects in greater detail. It is our interpretation that the EIA Regulations do not preclude specialist studies from being undertaken during the scoping phase. This also increased the ability to accurately describe the receiving environment and it was a proactive step taken to ensure that there are fewer gaps when it comes to the EIA phase. In fact, this provided the I&APs with better, more accurate information and, as such, it cannot be said that their ability to comment on the specialist studies was impeded. EIMS submits that this provided additional time and information to the I&APs with which a better understanding of the project could be gained, and as a result, a more informed decision could be made as to the information to be refined considered, investigated and refined during the EIA Phase. As mentioned above, the initial proposal for Marine Ecology and Fisheries assessments did not preclude the I&APs or the Competent Authority to request that additional studies be conducted subsequent to the review of the Plan of Study for EIA, which would have been informed by the content of the Scoping Report. It should also be noted that EIMS specifically applied for additional time to consult with the small-scale fishers and other community members and have given serious consideration to the comments and inputs from the local communities. Consequently, it is EIMS' contention that conducting the assessments

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specialist studies being conducted during the scoping phase, but rather that the scoping report should set out relevant information relating the assessment to follow, including the consultation process to be undertaken. - In contrast, the EIA Regulations do make provision for conducting specialist studies during the environmental impact reporting phase. An EIA report inclusive of any specialist reports must be submitted to the competent authority (i.e. the DMRE). The EIA report must contain all the information set out in Appendix 3 to the EIA Regulations, and specialist reports must contain all information set out in Appendix 6 to the EIA Regulations. Appendix 3 indicates that an EIA report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include (among other things) a summary of the findings and recommendations of any specialist report complying, and an indication as to how these findings and recommendations have been included in the final assessment report.. 24. While the plan of study included in the DSR indicates that EIA phase specialist studies 'will be undertaken as part of the EIA phase of the project', these studies were conducted prior to EIA phase (and in fact pre-dated the scoping phase). This is evident from the specialist studies annexed as appendices to the DSR, namely the Marine Faunal Impact Assessment (dated February 2021) and the Specialist Fisheries Assessment (dated March 2021). The DSR indicates that these specialists studies 'involved the gathering of data relevant to identifying and assessing preliminary environmental impacts that may occur as a result of the proposed project. These impacts were assessed according to pre-defined impact rating methodology (Section 9.1)'. 25. It is submitted that conducting these specialist studies (inclusive of 'preliminary' assessment of identified impacts) prior to the EIA phase of the environmental authorisation process is irregular, and taints the procedural fairness of the S&EIR process by effectively precluding I&APs from commenting on what specialists studies should be undertaken, the aspects to be assessed by specialists, and the proposed method for assessing all aspects to be assessed by specialists. Instead, PASA and EIMS had already decided (in the absence of any input from I&APs) what specialist reports would be conducted, and the specialist reports submitted prior to the EIA phase had already concluded that the proposed seismic survey would not impact significantly on marine fauna and fisheries. For example: - The February 2021 Marine Faunal Specialist Assessment rated the significance of preliminary impacts identified as negligible, very low or low. It stated further that if all environmental guidelines, and appropriate mitigation measures recommended are implemented, 'there is no reason why the proposed seismic survey should not proceed'. Various and detailed recommendations to mitigate potential impacts were also included in the report. - The March 2021 Specialist Fisheries Assessment included a section on small-scale fishers, and stated that the small-scale fisheries rights cover the nearshore area (i.e. within close proximity of the shoreline) and are unlikely to extend more than 3 nautical miles from the coast, and stated that '[t]here is no impact of temporary exclusion of fishing operations expected, as the proposed seismic acquisition area lies beyond the expected range of the linefish and rock

in this way, provided greater transparency and opportunity for informed comment and scrutiny by I&APs and the Competent Authority and can thus not be considered to be irregular.

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lobster catch areas'. 26. It is hardly surprising that the two specialist studies subsequently attached as appendices to the EIA report were not materially different to the versions attached to the DSR. As far as we can tell, the Marine Faunal Specialist Assessment is substantially the same, save for the date of the report having been changed from February 2021 to July 2021. 27 The Specialist Fisheries Assessment retains the same report date and is materially the same, but includes some additional information in relation to small-scale fisheries, rock lobster fisheries, abalone ranching, beach-seine and gill net fisheries and seaweed harvesting. This study makes an immaterial concession by assuming that linefish operations could be within the range of the nearshore extent of the proposed 3D seismic survey, but nevertheless concludes that '[t]he impact of temporary exclusion to small scale fishing operations is expected to be of overall LOW NEGATIVE significance'

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C. 27. Synthesis It is submitted that the environmental authorisation process has been tainted with irregularity as a result of: - an ultra-vires pre-application meeting between PASA and the EIA consultants; - an ultra vires decision by PASA at this pre-application meeting that specialist studies could be limited to a marine ecology and fisheries assessment; - the environmental authorisation application being irregularly submitted to PASA and not the competent authority; and - two specialist assessments being conducted prior to the EIA phase. 28. These irregularities have resulted in material prejudice to I&APs, rendering their right to participate in decision-making meaningless. 29. It is submitted that these irregularities constitute fatal flaws in the environmental authorisation process, and that the competent authority should as a consequence refuse to grant authorisation. 30. In the event that the DMRE decides to consider Tosaco's environmental authorisation application notwithstanding the fatal flaws described above, the Green Connection sets out its further comments on the environmental authorisation application below.

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D. NO ACOUSTIC MODELLING CONDUCTED 31. It is submitted that the environmental impact assessment undertaken is fatally flawed on the basis that no acoustic modelling has been conducted in respect of the proposed 3D seismic survey. 32. Tosaco seeks environmental authorisation to, among other things, conduct an additional 3D seismic survey over an area approximately 1 340 km². 29. 33. It is stated in the draft EIA report that '[d]uring seismic surveys high-level, low frequency sound pulses are generated by an acoustic instrument towed behind a

Response

Thank you for your comments. We refer to the individual responses relating to each of the aspects listed here. For the reasons outline above, EIMS contends that these do not constitute irregularities, but that due process was followed and that greater transparency and opportunity for comment was afforded to the affected communities, other I&APs and the Competent Authority.

Response

Thank you for your comments. As part of the marine ecological assessment, a detailed breakdown was provided of the anticipated effects of the sound generated by the airgun array during the 3D survey on each of the faunal groups. The noise effects described included physiological effects (physical injury/permanent threshold shift (PTS) and temporary threshold shift (TTS)) and behavioural disturbance. As most of the impacts were assessed to be of very low or low enough significance, the need for acoustic modelling was not considered necessary, especially given the

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survey vessel, just below the sea surface. The sounds are directed towards the seabed and the seismic signal is reflected by the geological interfaces below the seafloor³⁰. It is stated further in the draft EIA report that: The proposed survey would involve a seismic sound source (airgun array) and multiple hydrophone streamers, which would be up to 10,000 m long. The streamers would be towed at a depth of 9 m to 10 m below the surface and would not be visible, except for the tail-buoy at the terminal end of the cable. The sound source or airgun array would be towed 80 – 150 m behind the vessel at a depth of between 5 – 25 m below the surface... Each triggering of a sound pulse is termed a seismic shot, and these are fired at intervals of 10 – 20 seconds and at an operating pressure of between 2 000 to 2 500 psi and a volume of 3 000 to 5 000 cubic inches. Each seismic shot is usually only between 5 and 30 milliseconds in duration, and despite peak levels within each shot being high, the total energy delivered into the water is low. Airguns have most of their energy in the 5-300 Hz frequency range, with the optimal frequency required for deep penetration seismic work being 50-80 Hz. The maximum sound pressure levels at the source of airgun arrays in use today in the seismic industry are typically around 220 dB re 1µPa at 1 m, with the majority of their produced energy being low frequency of 10-100 Hz. The location where this level of sound is attained is directly beneath the airgun array, generally near its centre, but the exact location and depth beneath the array are dependent on the detailed makeup of the array, the water depth, and the physical properties of the seafloor. However, based on analogue sound sources, sound levels for the seismic survey can notionally be expected to attenuate below 160 dB less than 1 325 m from the source array. (emphasis added) 34. The draft EIA report does not indicate what specific array Tosaco is intending to use, or what the analogue sound sources' referred to in the draft EIA report are (the specific or range of 'analogue' sound sources referred to are not revealed or described). The basis on which the analogue sound sources are used to predict potential impacts is therefore unclear and unsubstantiated. 35. The draft EIA report goes on to state that: The airguns used in modern seismic surveys produce some of the most intense non-explosive sound sources used by humans in the marine environment (Gordon et al. 2004). However, the transmission and attenuation of seismic sound is probably of equal or greater importance in the assessment of environmental impacts than the produced source levels themselves, as transmission losses and attenuation are very site specific, and are affected by propagation conditions, distance or range, water and receiver depth and bathymetrical aspect with respect to the source array. In water depths of 25 - 50 m airgun arrays are often audible above ambient noise levels to ranges of 50 - 75 km, and with efficient propagation conditions such as experienced on the continental shelf or in deep oceanic water, detection ranges can exceed 100 km and 1,000 km, respectively (Bowles et al. 1991; Richardson et al. 1995; see also references in McCauley 1994). The signal character of seismic shots also changes considerably with propagation effects. Reflective boundaries include the sea surface, the sea floor and boundaries between water masses of different temperatures or salinities, with each of these preferentially

limited time that the survey would be undertaken for. Acoustic Modelling was not proposed in the Plan of Study for EIA and this was subsequently accepted by the Competent Authority. With reference to the Spectrum Multi Client Reconnaissance Application and the acoustic modelling study, it is understood that one of the areas overlaps with a portion of the proposed Tosaco area of interest. The acoustic modelling conducted for this study, found that the impacts would all be of low significance.

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scattering or absorbing different frequencies of the source signal. This results in the received signal having a different spectral makeup from the initial source signal. In shallow water (<50m) at ranges exceeding 4 km from the source, signals tend to increase in length from ><30 milliseconds, with a frequency sweep of between 200 – 500 Hz and a longer rise time.... In contrast, in deep water received levels vary widely with range and depth of the exposed animals, and exposure levels cannot be adequately estimated using simple geometric spreading laws (Madsen et al. 2006). These authors found that the received levels fell to a minimum between 5 - 9 km from the source and then started increasing again at ranges between 9 – 13 km, so that absolute received levels were as high at 12 km as they were at 2 km, with the complex sound reception fields arising from multi-path sound transmission.³² (emphasis added) It is stated further that: 3D seismic surveys are conducted on a very tight survey grid, typically over a smaller area within which promising petroleum prospects are suspected, the acoustic impact within the localised area persists for longer relative to that experienced within a particular location during a widely spaced 2D survey. Although the overall duration of a 3D survey is not necessarily longer than for a 2D survey, the impact of seismic noise will be locally somewhat higher for a 3D survey compared to a 2D survey. 2D surveys in contrast tend to be conducted over a larger area, and the spatial extent of the impact may thus be higher for 2D surveys. (emphasis added) ³⁶. It is evident from the above that there is no doubt that the high-level, low frequency sound pulses generated by an acoustic array will have sound impacts on the receiving marine environment (and more so than 2D seismic surveys), and that the transmission and attenuation of seismic sound is of equal or greater importance in the assessment of environmental impacts than the produced source levels themselves given that transmission losses and attenuation are very site specific, and are affected by propagation conditions, distance or range, water and receiver depth and bathymetrical aspect. ³⁷. Notwithstanding the above, no acoustic modelling has been conducted in the area earmarked for the 3D seismic survey. ³⁸. Instead, analogue information appears to have been drawn from published literature, as well as ‘sound transmission loss modelling undertaken for a licence block on the Agulhas Bank, where the shallowest point modelled was at similar depth to that of the proposed 3D survey area in Block 1’. The Agulhas Bank stretches from off the Cape peninsular to Port Alfred. Apart from the shallowest point modelled reportedly being at a similar depth to that of the proposed 3D survey area in Block 1, it is difficult to see how this modelling of possibly different sound arrays, in a different region, with different water temperatures and currents, and different habitats and bathymetry, can be sufficiently ‘analogous’ to serve as a reliable basis for impact assessment and decision-making. Nor is this explained in the draft EIA report. ³⁹. By contrast, it is pointed out that in respect of a reconnaissance permit application currently being made by Spectrum for permission to conduct a multiclient 2D seismic survey in various blocks of the West Coast (including portions of Block 1), the environmental management plan (EMP) published for public comment includes an underwater acoustics

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modelling study. 40. In his assessment of the impact of seismic surveys on South African Fisheries, Russell points out that 'there is no such thing as a typical seismic survey: research indicates precise responses to air gun and seismic survey noise are species specific and dependent on the actual noise exposure regime'. Russell states further that: Operational aspects such as the "zones of effect" (specific for each airgun signal), how many and how widely spaced they are; the depth and size of the prospecting area; particulars for the data acquisition; and duration of the survey, all need to be incorporated in the planning phase to give some idea of the full impact of a specified seismic survey. Risk assessments should include characteristics of the specific survey to be used, modelling of probable noise propagation in the area to be surveyed and knowledge of the species present and awareness of their biology. (emphasis added) 41. In Earthlife Africa Johannesburg v Minister of Environmental Affairs 2017 (2) SA 519 GP, the High Court gave judicial recognition to a climate change assessment being a relevant factor which must be considered before granting environmental impact authorisations, despite this not being specified in the regulatory framework. Following this reasoning, it is submitted that acoustic sound modelling is required in this EIA in order to more reliably assess the potential significance of the proposed 3D seismic survey on the targeted seismic survey area. 42. For the reasons set out above, the Green Connection submits that the draft EIA report is fatally flawed in the absence of a technology-specific acoustic sound modelling conducted in the proposed 3D seismic survey area, and that environmental authorisation should accordingly be refused. Should an environmental authorisation be granted in the absence of such acoustic sound modelling, the authorisation decision itself will be vulnerable to being set aside on review for failing to take a relevant factor into

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E. INFORMATION GAPS AND SCIENTIFIC UNCERTAINTY It has been pointed out earlier in these comments that the specialist studies undertaken in respect of the proposed 3D seismic survey were irregularly carried out prior to the impact assessment phase of the EIA (see paragraph), and that, save for some additional information added to the fisheries study, the reports annexed to the Draft EIA Report are substantially the same. 44. In addition, these specialist reports appear to be primarily desktop studies. The Marine Faunal Specialist Report states as much, and is at least in part based on a 2001 generic EMPR: As determined by the terms of reference, this study has adopted a desktop approach. Consequently, the description of the natural baseline environment in the study area is based largely on the baseline description provided in the Marine Faunal Assessment compiled in 2012 as part of the EIA for the Addendum to PetroSA's EMPr for 2D and 3D seismic surveying in Block 1, and the subsequent Marine Faunal Assessment compiled in 2012 as part of the EIA for well drilling by Cairn South

Response

Thank you for your comments. Despite the fact that the studies for this particular area involved desktop assessments, the information that the study was based on was done according to well established research done in the block and, as stated, updated using more recent studies and information from actual marine mammal observers. It should be recognised that the Generic EMPr was requested by PASA when the compilation of EMPrs became a prerequisite for exploration applications. The Generic EMPr thus forms the foundation of all subsequent EMPrs and EIAs done for hydrocarbon exploration. At the time, it provided a comprehensive summary of the environmental baseline conditions along each coastline (West, South and East Coasts) and the impacts of hydrocarbon exploration on marine fauna and fisheries. In subsequent specialist studies as part of EMPrs/EIAs, both the environmental baseline description as well as the environmental impact section have been updated as new information has become available in the literature. It should further be noted that the mitigation measures provided in the Generic EMPr,

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Africa (Pty) Ltd. These reports in turn was based on a review and collation of existing information and data from the scientific literature, internal reports and the Generic Environmental Management Programme (EMPr) compiled for oil and gas exploration in South Africa (CCA and CMS 2001). Information on the baseline environment had been updated where appropriate. The information for the identification of potential impacts of seismic activities on marine fauna was drawn from various scientific publications, the Generic EMPr, information sourced from the Internet as well as Marine Mammal Observer close-out Reports. The sources consulted are listed in the Reference chapter. It is relevant to note that the 2001 EMPr was co-funded by the offshore prospecting operators and co-ordinated by the Petroleum Agency SA and that the consultants were commissioned by PASA to draw-up this Generic Environmental Management Programme Report (EMPR) model in order to address concerns raised by industry regarding the time and cost incurred in compiling an EMPr for each individual prospect programme. As a consequence this EMPr cannot be viewed as independent. Notwithstanding this, the generic Environmental Impact Report developed as part of this 2001 EMPr acknowledges regarding the impact of seismic activities on marine animals that [a] specific shortfall of information in this regard was identified on the West Coast, while the Baseline Environmental Report also developed as part of this 2001 EMPr cautions that [i]t should be noted that advances in technology are allowing oil and gas exploration activities to extend into deeper water environment (beyond the 10000 m isobath) and that very little information is available on biological communities in these areas. 45. The specialist studies conducted for the Tosaco EIA also acknowledge a lack of available data relating to the proposed 3D seismic survey area, and document a number of uncertainties. 46. For example, the draft EIA report, DSR and/or Marine Faunal Specialist Report indicate that (among other things): - A 2018 National Biodiversity Assessment for the marine environment points out that very few national IUCN Red List assessments have been conducted for marine invertebrate species to date owing to inadequate taxonomic knowledge, limited distribution data, a lack of systematic surveys and limited capacity to advance species red listing for these groups. - South Africa's Seamounts and their associated benthic communities have not been extensively sampled by either geologists or biologists. - Leatherback turtles are indicated as the only turtle likely to be encountered in the offshore waters of west South Africa, 'their abundance in the study area is unknown but expected to be low.' - 33 species of whales and dolphins are known to occur in these waters, including the blue whale (critically endangered) and fin and sein whales (endangered). 17 species are listed as data deficient. The offshore areas have been particularly poorly studied with almost all available information from deeper waters (>200m) arising from historic whaling records prior to 1970. Current information on the distribution, population sizes and trend of most cetacean species occurring on the west coast of southern African is lacking. Information on smaller cetaceans in deeper waters is particularly poor and the precautionary principle must be used when considering possible encounters with cetaceans in this area'. - While it is claimed

are the basics that were signed off by PASA at that time. These have been much improved over the years to include international recommendations adjusted to be more applicable to the local oceanographic conditions and marine fauna, as well as including specific measures to be implemented by MMOs under various onboard situations. Many of these more specific mitigation measures were compiled in collaboration with experienced MMOs. As such, there has been a significant improvement in the implementation of environmental management measures as part of the surveys since the Generic EMPr was first published. It should therefore be noted that with these constantly updated and improved mitigation measures, both marine fauna and fisheries are now offered better protection, than was the case when the original Generic EMPr was drafted and its contents accepted by the authorities. With reference to point 52 of your letter, it should be noted that the impacts associated with each of these groups have been assessed in greater detail than the document referenced and have been considered for the specific habitat and species occurring within the proposed seismic acquisition area. Consequently, it can be stated with regards to the uncertainties and gaps in knowledge, these have specifically been taken into consideration during the assessment of the particular impacts related to the faunal groups and fishing activities. The confidence level of the rating has been stated and, the level and type of mitigation proposed has followed the clear mitigation hierarchy presented in the Specialist reports and also the EIA Report. Accordingly, the mitigation measures proposed are deemed to be sufficient to account for the eventuality that unforeseen events or organisms responses are encountered during the actual survey operations and will ensure that there is independent oversight and feedback to ensure compliance with the EMPr.

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that increasing numbers of southern right and humpback whales suggests that seismic surveys conducted over the past 17 years have not negatively influenced the distribution patterns of these two migratory species at least, 'information on the population trends of resident species of baleen and toothed whales is unfortunately lacking, and the potential effects of seismic surveys on such populations remain unknown.' - While relatively low behavioural risks are expected for fish species at far field distances (thousands of meters) from a source location, 'as hearing sensitivity can vary with life-cycle stage, season, locality and duration of shooting..., it is difficult to determine with accuracy the impact of seismic sound on the behaviour of fish.' - It is recognised that changes in spawning, migration and feeding behaviour of fishes in response to seismic shooting 'could indirectly affect fisheries through reduced catches resulting from changes in feeding behaviour, abundance and vertical distribution... Such behavioural changes could lead to decreased commercial catch rates if fish move out of important fishing grounds.... Reports on observed declines in catch rates differ considerably between studies, between target species and gear types used, ranging from no apparent reduction to an 83% reduction in bycatch in shrimp trawl... and typically persisting for a relatively short duration only (12 hours to up to 10 days)', while the distance from the seismic source at which reductions in catch rates were measured 'also varied substantially between studies ranging from approximately 8 km to as much as 36 km... Airgun noise related to changes in prey and predator species of commercially important species could also play a role in affecting catch rates... Information on feeding success of fish (or larger predators) in association with seismic survey noise is lacking'. - It is reported that seismic activities have been 'predicted to possibly affect the migration patterns of tuna leading to substantially reduced catches of albacore and southern bluefin tuna in southern Namibia... In the Benguela region it has been suggested that the seasonal movement of longfin tuna northwards from the west coast of South Africa into southern Namibia may be disrupted by the noise associated with seismic surveys. Longfin and other tuna species migrations are known to be highly variable from year to year and are associated with prey availability and also favourable oceanographic conditions. While the potential exists to disrupt the movement of longfin tuna in the Benguela, this disruption, if it occurs, would be localised spatially and temporarily and would be compounded by environmental variability... As there is currently a dearth of information on the impacts of seismic noise on truly pelagic species such as swordfish and tuna..., links between changes in migration patterns and subsequent catches thus remains speculative'. - It is stated that 'although the effects of airgun noise on spawning behaviour offish have not been quantified to date, it is predicted that if exposed to powerful external forces on their migration paths or spawning grounds, they may be disturbed or even cease spawning altogether. The deflection from migration paths may be sufficient to disperse spawning aggregations and displace spawning geographically and temporally, thereby affecting recruitment of fish stocks. The magnitude of effect in these cases will depend on the biology of the species and the extent of the dispersion or deflection.

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Depending on the physical characteristics of the area, the range of the impact may extend beyond 30 km..., and could thus potentially affect subsequent recruitment of fish stocks if spawning is displaced geographically or temporally.' 47. The Assumptions and Limitations section of the draft EIA report also indicates that information gaps with regard to marine ecology, including: - Details of the benthic macrofaunal communities and potentially vulnerable species in deep water habitats; and - Current information on the distribution, population sizes and trends of most pelagic seabird, turtle and cetacean species occurring in South African water and the project area in particular." 48. With regard to fisheries, the same section of the EIA Report indicates that: - The effect of seismic sound on the CPUE [catch per unit effort] of fish and invertebrates have been drawn from the findings of international studies. To date there have been no studies focused directly on the species found locally. Although the results from international studies are likely to be representative for local species, current gaps in knowledge on the topic lead to uncertainty when attempting to accurately quantify the potential loss of catch for each type of fishery. Research into the effects of seismic sound on marine fauna is ongoing.' (emphasis added).

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Comment

F. MPAs, EBSAs, CBAs, ESAs and VMEs 55. Block 1 and/or the proposed seismic survey area intersects Marine Protected Areas (MPAs), provides habitat or migratory routes to a number of critically endangered, endangered or threatened species, and also includes Ecologically or Biologically Significant Areas (EBSAs), Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) and Vulnerable Marine Ecosystems (VMEs). 56. For example, the draft EIA Report indicates that: - Seamounts provide an important habitat for commercial deep water fish stocks such as Patagonian toothfish, which aggregate around these features either for spawning or feeding. 'Consequently, the fauna of seamounts is usually highly unique and may have a limited distribution restricted to a single geographic region, a seamount chain or even a single seamount location. As a result of conservative life histories... and sensitivity to changes in environmental conditions, such biological communities have been identified as Vulnerable Marine Ecosystems (VMEs). They are recognised as being particularly sensitive to anthropogenic disturbance (primarily deep-water trawl fisheries and mining), and once damaged rare very slow to recover, or may never recover'.75 - The fish most likely to be encountered on the shelf and in the offshore waters of Block 1 are large migratory pelagic species, such as tuna, billfish and sharks, 'many of which are considered threatened by the International Union for the Conservation of Nature (IUCN), primarily due to overfishing'.76 - Leatherback turtles are indicated as the only turtle likely to be encountered in the offshore waters of west South Africa, and '[t]heir abundance in the study area is unknown but expected to be low'.77 Leatherback

Response

Thank you for your comments. Two geological features of note in the vicinity of Block 1 are Child's Bank, situated ~75 km south of the southern boundary of Block 1 at about 31°S, and Tripp Seamount situated at about 29°40'S, ~25 km west of the western tip of Block 1. The impacts on the seamounts and VMEs were specifically addressed as can be seen from the Section 4.3.1 of the Marine Ecological Assessment which states: "A peak SPL of >207 dB has been established for mortality and potential mortal injury of fish eggs and larvae (see Child's Bank and Tripp Seamount lie ~50 km south and ~30 km north of the southern and western boundaries of Block 1, respectively, and any demersal species associated with these important fishing banks would receive the seismic noise within the far-field range. As the 3D surveys will be undertaken in water depths in excess of 100 m, the received noise by demersal species at the seabed within Block 1 would similarly be within the far-field range, and outside of distances at which physiological injury or avoidance would be expected, it is deemed of MINOR intensity across the survey area (SITE) and for the survey duration (IMMEDIATE) and is considered to be of LOW (NEGLIGIBLE) environmental risk, both with and without mitigation, and of LOW (NEGLIGIBLE) significance." Similarly, for each of the remaining faunal groups mentioned, an assessment of the impacts of the proposed survey has been assessed in detail and yielded similar significance ratings. It is further contended that the responses to previous comments, the EIA Report and Specialist Assessment does not attempt to side step the issue of MPAs, EBSAs, CBAs, ESAs and VMEs, but has specifically investigated and determined the level of risk associated with the proposed survey and with due

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turtles are listed as 'critically endangered' by the IUCN, and 'are in the highest categories in terms of need for conservation in CITES... and CMS'. The 2017 South African lists of Threatened and Endangered Species (TOPS) similarly list the species as 'critically endangered', while the National Assessment listed them as 'endangered'. 'South Africa is thus committed to conserve these species at an international level'.⁷⁸ A number of conservation areas and a MPA exist along the coastline of the Western Cape. The DSR states that 'the only conservation area in the vicinity of the project area in which restrictions apply is the McDougall's Bay rock lobster sanctuary near Port Nolloth... The Orange River Mouth wetland located at the northern corner of Block 1 provides an important habitat for large numbers of a great diversity of wetland birds and is listed as a Global Important Bird Area (IBA)... The area was designated as a Ramsar site in June 1991, and processes are underway to declare a jointly-managed transboundary Ramsar reserve. Various Marine IBAs have also been proposed in South African and Namibian territorial waters, with a candidate trans-boundary marine IBA suggested off the Orange River mouth.... Block 1 lies south of the Atlantic Southeast 21 marine IBA and overlaps with the candidate Orange River Mouth Wetland IBA.'⁷⁹ - Block 1 overlaps with the Orange Shelf Edge and Namaqua Fossil Forest MPA.⁸⁰ According to figure 84,⁸¹ the proposed 3D seismic survey area overlaps part of the Namaqua Fossil Forest EBSA. The fossilized trees 'are not known to be found anywhere else in our oceans and are valuable for research into past climates. In 2014 this area was recognised as globally important and declared as an EBSA. The 1 200 km² MPA protects the unique fossil forests and the surrounding seabed ecosystems and including a new species of sponge previously unknown to science'.⁸² - A number of 'endangered' and 'vulnerable' ecosystems types are currently not well protected. 'Currently... most of the Southern Benguela Sandy Shelf Edge and Southeast Atlantic Upper- and Mid-Slope are poorly protected... whereas the Southeast Atlantic Lower Slope receives no protection at all'.⁸³ - 'As part of a regional Marine Spatial Management and Governance Programme (MARISMA 2014-2020) the Benguela Current Commission (BCC) and its member states have identified a number of EBSAs... with the intention of implementing improved conservation and protection measures within these sites'. 3 trans-boundary EBSA's are shared with Namibia. 'The principal objective of these EBSAs is identification of features of higher ecological value that may require enhanced conservation and management measures. They currently have no legal status'.⁸⁴ - Regarding EBSA's, Figure 86 indicates critical biodiversity areas and an ESA in the proposed 3D seismic survey area. The DSR indicates that 'Future activities that may be prohibited in the conservation zone of these EBSAs includes mining construction and operations, although non-destructive or highly localised prospecting activities may be conducted in the impact management zone. Block 1 and the proposed 3D survey area overlaps with the southern portion of the Namaqua Fossil forest EBSA biodiversity conservation zone in which non-destructive exploration and destructive localised impacts such as exploration wells will be conditionally permitted, but petroleum production is considered incompatible. It must be noted however,

consideration of the habitat and ecological function provided by these sensitive areas. In fact, one of the main proposed alternatives for the survey area avoided the most sensitive of these (Namaqua Fossil Forest MPA) altogether and included an additional buffer zone which affords additional protection to the EBSAs referred to.

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however, that the EBSA Zone boundaries are subject to ongoing revision based on discussions with the National EBSA Working Group. These zones have been incorporated into the most recent iteration of the national Coastal and Marine Critical Biodiversity Area (CBA) Map... released on 26 February 2021 (Figure 86). This indicates that CBA1 and CBA2 regions extend south and offshore of the Namaqua Fossil Forest MPA and across the proposed 3D survey area. CBA 1 indicates irreplaceable or near-irreplaceable sites that are required to meet biodiversity targets with limited, if any, option to meet targets elsewhere, whereas CBA 2 indicates optimal sites that generally can be adjusted to meet targets in other areas. Ecological Support Areas (ESAs) represent EBSAs outside of MPAs and not already selected as CBAs. Sea-use within the CBAs and ESAs reflect those specified by the EBSA biodiversity conservation and management zones described above'.⁸⁵ (emphasis added) 57. In its comments on the DSR, the Green Connection submitted that in light of the data and information gaps and lack of certainty acknowledged in the DSR, and having regard to these EBSAs, CBAs, ESAs and VMEs located in the proposed seismic survey area, the proposed 3D seismic survey should not proceed until sufficient knowledge and information is available (properly applying the precautionary approach). 58. In its response to the Green Connection's comments on the DSR, EIMS attempt to side-step the importance of these areas by pointing out that 'CBAs and EBSAs currently carry no legal status' but that 'despite this, the [marine ecology] specialist has assessed the impacts on the various organism groups and identified mitigation measures that reduce the residual risk of the proposed activities, despite the information gaps. As such, the mitigation measures proposed provide the necessary risk averse and cautious approach'. 59. For the reasons set out in paragraph E above, the Green Connection contests the assertion that a proper assessment of the impacts on various organism groups could be conducted 'despite the information gaps', or that the mitigation measures constitute a risk averse and cautious approach to the assessment of impacts where there are significant information gaps, as well as scientific uncertainty regarding the impacts of 3D seismic surveys on marine fauna. 60. With regard to the statement made by EIMS that CBAs currently carry no legal status, it is submitted that EBSAs, CBAs, ESAs and VMEs merit special consideration, and that adverse impacts on such areas and ecosystems should be avoided. Among other things, it is relevant to note that the National Environmental Management: Biodiversity Act (NEMBA)⁸⁷ requires the State, in fulfilling the rights contained in section 24 of the Constitution, to manage, conserve and sustain South Africa's biodiversity and its components and genetic resources, and to implement NEMBA to achieve the progressive realisation of those rights.⁸⁸ Exercising powers contained in section 38 of NEMBA, the Minister responsible for environmental affairs published a National Biodiversity Framework (NPF).⁸⁹ The NBF indicates that its purpose is (among other things) to provide a framework for conservation and development, and that there is need to achieve economic growth in a way that allows for the continued functioning of ecosystems and persistence of the natural resource base. The NBF indicates that sustainable development depends on where and how development takes place,

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and states that development is not sustainable if it results in (among other things) 'loss and degradation of habitat in threatened ecosystems and critical biodiversity areas'.⁹⁰ Consideration of the sustainability of a proposed activity thus requires consideration of the risk of loss or degradation in such threatened ecosystems and critical biodiversity areas. 61. The Green Connection submits that the presence of these EBSAs, CBAs, ESAs and VMEs located in the proposed seismic survey area are relevant factors that have to be taken into account by the competent authority when making its decision on authorisation, and that it must do so in a manner that meets its duty to fulfil the rights contained in section 24 of the Constitution by managing, conserving and sustaining South Africa's biodiversity and its components and genetic resources. The Green Connection submits further that it is inappropriate to authorise 3D seismic surveys in such environmentally sensitive areas (which surveys could result in subsequent invasive exploration and production drilling activities, with additional significant risks to these areas). Accordingly, it is submitted that the environmental authorisation application should be refused.

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Comment

G. NEED AND DESIRABILITY 62. The NEMA EIA Regulations indicate that the objective of the EIA process is to (among other things) describe the need and desirability for the proposed activity in the context of the development footprint on the approved site as contemplated in the accepted scoping report,⁹¹ and an EIA report must contain a motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred development footprint within the approved site as contemplated in the accepted scoping report. 63. As was pointed out in the Green Connection's comment on the DSR, a distinction is drawn between the 'general purpose and requirements' of the proposed activity and 'need and desirability'. The 2017 Guideline on Need and Desirability states as follows: In order to properly interpret the EIA Regulations' requirement to consider "need and desirability", it is necessary to turn to the principles contained in NEMA, which serve as a guide for the interpretation, administration and implementation of NEMA and the EIA Regulations. With regard to the issue of "need", it is important to note that this "need" is not the same as the "general purpose and requirements" of the activity. While the "general purpose and requirements" of the activity might to some extent relate to the specific requirements, intentions and reasons that the applicant has for proposing the specific activity, the "need" relates to the interests and needs of the broader public. The consideration of "need and desirability" in EIA decision-making therefore requires the consideration of the strategic context of the development proposal along with the broader societal needs and the public interest. The government decision-makers, together with the environmental assessment practitioners and

Response

Thank you for your comments. It is our contention that the need and desirability has been described sufficiently considering that the proposal only relates to 3D Seismic Survey. EIMS would like to reiterate, that as pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the need and desirability of such activities given that the specific details of these potential future activities are not known. It should further be noted that the life cycle of the current project is limited to the exploration activities as stated in the various reports and this has been the focus of the Scoping and EIA Process. It is in our view premature to assess the likely impacts of further invasive exploration activities or production activities as the extent, duration, location, and magnitude applicable to these activities are unknown at this stage. There is provision in law for these activities to be assessed on their merits as and when they are proposed.

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planners, are therefore accountable to the public and must serve their social, economic and ecological needs equitably. Ultimately development must not exceed ecological limits in order to secure ecological integrity, while the proposed actions of individuals must be measured against the short-term and long-term public interest in order to promote justifiable social and economic development – i.e. ensuring the simultaneous achievement of the triple bottom-line. Considering the merits of a specific application in terms of the need and desirability considerations, it must be decided which alternatives represent the “most practicable environmental option”, which in terms of the definition in NEMA and the purpose of the EIA Regulations are that option that provides the most benefit and causes the least damage to the environment as a whole, at a cost acceptable to society, in the long-term as well as in the short-term.⁹³ (emphasis added) 64. Given that exploration operations are intended to define traps to be tested by drilling of a well with the intention of locating a discovery (of hydrocarbons below the seabed), and which in turn would likely lead to production operations should commercially exploitable hydrocarbon resources be discovered, the Green Connection is of the view that addressing the need and desirability within the context of ecologically sustainable development requires at the very least an initial assessment and consideration of the environmental health and safety consequences of the project, including an assessment of need and desirability, throughout its life cycle⁹⁴ (rather than ring-fencing the assessment of impacts and the consideration of need and desirability to the reprocessing of seismic data and acquisition of new seismic data). 65. This will necessarily entail a consideration of (among other things): - Climate change impacts associated with exploration, production and use of hydrocarbons discovered in Block 1, including: its impact on South Africa’s ability to meet its international responsibilities to address climate change; whether the proposed project promotes increased dependency on non-renewable hydrocarbon resources or reduces such resource dependency; and whether the exploration for and subsequent discovery of new hydrocarbon resources will impact positively or negatively on future generations of South Africans; - Ecological and socio-economic impacts associated with a major oil spill (such as an uncontrolled wellhead blowout) during likely future exploration well drilling and testing and/or production activities, including potential impacts on small-scale fishers and coastal communities that depend on the ocean for their livelihoods; and - Critical Biodiversity Areas and Ecological and Biologically Significant Areas located within Block 1 and within the proposed seismic survey area where ‘petroleum production is considered incompatible’ 66. It is noted that EIMS limits the consideration of need and desirability to the exploration for oil and gas (excluding drilling), stating that the project ‘will not, at this stage, involve the use of natural resources identified as part of the proposed exploration project’, while at the same time acknowledging that ‘[t]he proposed project aims to identify oil and gas resources to be used in the energy production and/or processing or manufacturing of materials’.⁹⁶ 67. It is also noted that in relation to the question of whether a risk-averse and cautious approach was applied to socio-economic impacts, the draft EIA report indicates that ‘[t]

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he level of risk is low as the project is not expected to have far reaching negative impacts on socio-economic conditions. Since the exploration activities will not include any drilling at this stage, a risk averse and cautious approach had been implemented to limit the impact on the surrounding environment'.⁹⁷ It is difficult to see how this constitutes a proper application of the precautionary approach given that that the project aims to identify oil and gas resources to be used in the energy production and/or processing or manufacturing of materials. 68. NEMA section 2(4)(a)(vii) stipulates that sustainable development requires the consideration of all relevant factors, including that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions. It is submitted that ring-fencing the EIA application to exclude reasonably foreseeable future impacts (i.e. climate change impacts or catastrophic oil spill impacts that could arise from future hydrocarbon exploration drilling and production activities should commercially exploitable resources be discovered) is not a rational application of the 'risk-averse and cautious approach' required by NEMA in relation to need and desirability. The approach taken in the EIA artificially removes potentially significant life cycle impacts (in this context potential impacts associated with the exploration for and production of oil and gas resources) from consideration in the EIA, notwithstanding that the proposed exploration is aimed at identifying oil and gas resources to be used in (among other things) energy production, and notwithstanding that that future exploration drilling and ultimately production activities are likely to follow. 69. In response to the above comments made in relation to the DSR, EIMS responded by pointing out that 'it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the need and desirability of such activities given that the specific details of these future activities are not known'.⁹⁸ EIMS respond further by stating that the 'life-cycle of the current project is limited to the exploration activities as stated in the DSR and this will be the focus of the Scoping and EIA process. It is in our view premature to assess the likely impacts of further invasive exploration activities as the extent, duration, location and magnitude applicable to these activities is unknown at this stage. There is provision in law for these activities to be assessed on their merits as and when they are proposed'.⁹⁹ 70. The Green Connection submits that the EIA has failed to provide an adequate description of and motivation for the need and desirability of the proposed development in the broader sustainable development context or in the context of the preferred development footprint within the proposed 3D survey area. The EIA report fails to address need and desirability within the broader context of the global climate emergency (and South Africa's responsibilities to contribute towards global efforts to minimise greenhouse gas emissions), and fails to consider whether it is necessary and desirable to pursue additional oil and gas exploration having regard to significant gas discoveries made off the South Cape Coast (the Brulpadda exploration well was completed in 2018/2019, which was reported in the TEPSA draft Scoping Report as having been successful in yielding a significant gas condensate

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discovery100). The EIA report also fails to address need and desirability within the context of project's overall intention of identify oil and gas resources (a non-renewable natural resource) with a view to further exploration (invasive well drilling and testing) and production activities (which would inevitably follow should commercially exploitable oil and gas resources be identified). Exploration for (and ultimately production of) oil and gas resources will, in the Green Connection's view, exacerbate the increased dependency on the use of natural resources to maintain economic growth, and will in no way reduce resource dependency (i.e. de-materialised growth). 71. In light of the above, the Green Connection submits that the need and desirability has not been adequately assessed, that the proposed and/or likely future exploration and production activities are not needed or desirable, and that environmental authorisation should accordingly be refused.

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H.NO GO OPTION 72. With regard to the 'no go alternative', the Draft EIA Report states as follows: The no go alternative would imply that no exploration activities are undertaken. As a result, the opportunity to identify potential oil and gas resources within the Block 1 and proposed 3D survey area would not exist. This will negate the potential negative and positive impacts associated with the proposed exploration activities.101 and The no go alternative would imply that no exploration activities are undertaken and, as such, the negative impacts as stated above, would not materialise. However, conversely, this will negate the potential positive impacts associated with the proposed exploration activities, including: • The opportunity to identify potential oil and gas resources within the Block 1 and proposed 3D survey area; and • Provision of job opportunities (limited during the exploration phase). Since there are no mitigation measures, the impact significance will be LOW pre- and post-mitigation and final significance will be the same.102 73. It is pointed out that while the EIA excludes from consideration the evaluation of impacts of exploration well drilling and future production activities, in relation to the 'no go alternative' the draft EIA Report asserts that 'potential positive impacts associated with the proposed exploration activities' would be negated, namely the opportunity to identify potential oil and gas resources within Block 1 and the proposed 3D survey area, and the provision of job opportunities (indicated as 'limited' during the exploration phase). The Green Connection submits that this again highlights the contradictory approach taken in the EIA, namely to exclude potential impacts associated with likely future exploration drilling and production activities, but to refer to these very activities when (in this context) motivating that the 'no-go' option would negate the 'potential positive' impacts associated with the likely future oil and gas exploration and production activities. 74. The Green Connection submits further that the potential positive impacts of the 'no go alternative have not been

Response

Thank you for your comments. With reference to the potential positive impacts referred to, it should be noted that these seem have been misinterpreted by the Green Connection to refer to the potential future phases (i.e. including further exploration or production activities) not included in the scope of this assessment. However, as stated in the EIA Report, reference only made to the opportunity to identify oil and gas resources, and not the potential future activities themselves. Similarly, the limited employment opportunities referred to in the EIA Report, only refer to those specifically for the exploration activities proposed as part of this project. Further to this, a detailed EIA process has been undertaken and during which no fatal flaws were identified and all of the impacts identified have been found to be of very low or low significance post-mitigation.

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adequately identified or assessed. Selecting the 'no go' option would be consistent with the NEMA sustainable development principles that emphasise the need to avoid the disturbance of ecosystems, and to prevent negative impacts on the environment and people's rights.¹⁰³ It would also ensure that marine ecosystems in Block 1 would be protected, including the interdependence of these marine ecosystems. Selection of the 'no go' option would result in the avoidance of (for example, but not limited to): - The negative impacts associated with 3D seismic surveys (such as ecosystem impacts and impacts on small-scale fishers whose livelihoods would be negatively impacted should the 3D seismic survey result in reduced catches); and - The negative consequences that would arise should commercially exploitable oil and gas resources be discovered in the area, which consequences have not been assessed (such as climate change impacts associated with extraction and processing of fossil fuels, and the potentially catastrophic impacts associated with an uncontrolled wellhead blowout). 75. The Green Connection persists with its view that the potential ecological and socio-economic risks associated with the proposed 3D seismic survey and likely future exploration drilling and petroleum production activities (having regard to the global climate emergency and the potentially devastating impacts of a catastrophic oil spill) require a proper assessment and consideration of the benefits of selection of the "no go option". The draft EIA report fails to do so, and as a result does not contain the information that is necessary for the competent authority to consider and come to a decision on the application. Accordingly, the Green Connection submits that environmental authorisation should be refused.

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Comment

I. FAILURE TO CONDUCT CLIMATE CHANGE ASSESSMENT 76. It is noted that the draft EIA report does not address climate change impacts associated with the exploration for and production of oil and gas in Block 1 (i.e. the extraction and use of greenhouse gas (GHG) emitting fossil fuels), nor does it address how climate change may impact on such exploration and production activities. 77. The UN Framework Convention on Climate Change enjoins State Parties to take precautionary measures to anticipate, prevent or minimize the causes of climate change.¹⁰⁴ Recently, the UN's Intergovernmental Panel on Climate Change (IPPC) issued a press release relating to its 6th Report, which states that '[t]he report provides new estimates of the chances of crossing the global warming level of 1.5°C in the next decades, and finds that unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to close to 1.5°C or even 2°C will be beyond reach'.¹⁰⁵ Having regard to the global Climate Emergency¹⁰⁶ and South Africa's international commitment¹⁰⁷ to 'working with others to ensure temperature increases are kept well below 2°C above pre-industrial levels, which could include a further revision of the temperature goal to below 1.5°C in light of emerging

Response

Thank you for your comment. EIMS would like to point out that the intention of this EIA is not to do a piecemeal assessment of the proposed project and its impacts on the receiving environment. The focus of this EIA was to identify and assess the impacts applicable to the proposal and this is necessarily limited to the activities presented in the EIA Report. As mentioned previously, while EIMS agrees that the risks mentioned would need assessment, such assessment falls outside of the scope of the current application and would need to be assessed in detail during subsequent processes, should drilling or production be proposed. The environmental consequences applicable to the planned exploration activities have been identified and assessed in the EIA Report. There is provision in law for future activities (including exploration drilling and production) to be assessed and decided upon, on their merits as and when they are proposed, and prior to commencement of such. As pointed out above, and as per our previous response to the Green Connection in this regard, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to accurately assess the risks associated with these activities, given that the specific details of these potential future

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science'108 by reducing GHG emissions, Tosaco's proposed exploration for offshore oil and gas resources would, if additional commercially viable resources are found and developed to production phase, inevitably add to the South Africa's overall GHG emissions (South Africa's energy sector currently contributes an estimated 84% percent to the country's overall GHG emissions).109 78. In response to the above comments made in relation to the DSR, EIMS responded by pointing out that 'it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the need and desirability of such activities given that the specific details of these future activities are not known. On the basis of the exploration activities currently proposed it is unlikely that there will be significant climate change impacts'.110 EIMS respond further by stating that '[w]hile it is acknowledged that the risks mentioned would need assessment, such assessment falls outside the scope and of the current application and would need to be assess (sic) in detail during subsequent Scoping and EIA processes, should drilling or production processes be proposed. The environmental consequences applicable to the planned exploration activities have been identified and assessed in the Scoping Report. There is provision in law for future activities (including exploration drilling and production) to be assessed and decided upon, on their merits as and when they are proposed, and prior to commencement of such'. 79. The Green Connections stands by its assertion that as reasonably foreseeable future impacts that may become more significant when added to the existing and reasonably foreseeable GHG impacts arising from similar offshore oil and gas exploration and production activities in South Africa's exclusive economic zone, the impacts (including cumulative impacts112) of such GHG emissions should have been identified in the DSR, and the impact thereof assessed in the EIA phase. Tosaco should not be permitted to side-step such an assessment by conducting this EIA in a piecemeal fashion. It is submitted that it is relevant for the competent authority to consider these impacts at this stage in the EIA process, given that if the climate change impacts are found to be unacceptable there is no reason for Tosaco to be permitted to continue with the successive stages of exploration and production authorisation and permitting processes. The failure to do so unfairly prejudices I&APs opposed to further offshore oil and gas drilling operations, as by the time future applications are made and assessments conducted, significant time and resources will already have been expended by Tosaco (potentially shifting the balance of convenience in Tosaco's favour in future authorisation applications). 80. It is submitted further that including an assessment of the reasonably foreseeable climate change impacts of Tosaco's offshore oil and gas exploration relating to probable future exploration drilling and production activities would also be consistent with the NEMA environmental management principles that emphasise the need to avoid the disturbance of ecosystems, and to prevent negative impacts on the environment and people's rights.113 It would also be consistent with section 2(4)(e) of NEMA, which stipulates that responsibility for the environmental health and safety consequences of a policy,

activities are not known. On the basis of the exploration activities currently proposed it is unlikely that there will be significant climate change impacts.

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programme, project, product, process, service or activity exists throughout its life cycle. 81. aSuch an approach would also be consistent with the approach taken by High Court in Earthlife Africa Johannesburg v Minister of Environmental Affairs 2017 (2) SA 519 GP, which - in relation to the issue of whether or not a climate change impact was necessary for a proposed coal-fired power station - stated that 'a climate change impact assessment is necessary and relevant to ensuring that the proposed coal-fired power station fits South Africa's peak, plateau and decline trajectory as outlined in the [NDC] and its commitment to build cleaner and more efficient than existing power stations'.114 Following this reasoning, the Green Connection submits that is equally necessary and relevant to ensure that proposed exploration activities (including reasonably foreseeable future exploration well drilling and oil and gas production activities) fit South Africa's peak, plateau and decline trajectory as outlined in South Africa's updated Nationally Determined Contributions (NDCs).115 82. The Green Connection also stands by its previous submission that the EIA should address the implications of climate change on oceans. The IPCC116 has identified that coastal systems will experience climate change-related impacts due to sea level rise and associated storm swells. In addition, there is medium agreement that the Benguela system will experience changes in upwelling intensity as a result of climate change. The Green Connection submits that the EIA should therefore include a study on the potential impacts that changes in ocean currents, increased severity of storms etc. could have on future exploration and production drilling activities. 83. For the reasons set out above, the Green Connection submits that as a consequence of the EIA failing to address climate change impacts associated with the exploration for and production of oil and gas in Block 1 (i.e. the extraction and use of greenhouse gas emitting fossil fuels) or the potential impacts of climate change on such exploration and production activities, the draft EIA report does not contain the information that is necessary for the competent authority to consider and come to a decision on the application. Accordingly, the Green Connection submits that environmental authorisation should.

Date 2021/10/04 Method Email

Comment

J. FAILURE TO ASSESS CUMULATIVE IMPACTS OF OTHER SEISMIC SURVEYS 84. As mentioned earlier in these comments, a reconnaissance permit application is currently being made by Spectrum for permission to conduct a multiclient 2D seismic survey in various blocks of the West Coast (including portions of Block 1).117. 85. The draft EIA Report fails to mention this multiclient survey, or assess the potential cumulative impacts should the proposed Tosaco 3D seismic survey and proposed Spectrum 2D multiclient survey be conducted within the same period of time. 86. Russell points out the following regarding cumulative impacts of seismic surveys: Controls also need to be put in place to reduce cumulative impacts – in recent years

Response

Thank you for your comments. Reference is made to the Spectrum EMP, which states: "Spectrum Geo Limited proposes to undertake 2D seismic acquisition in the Orange Basin off the West Coast of South Africa. The survey will comprise the acquisition of 14 100 km of 2D seismic data over a period of ~150 days. The survey is anticipated to commence in December 2021." With reference to the Exploration Works Programme (EWP) detailed in the EIA Report, it should be noted that year one and two of the proposed three year programme, would not involve any physical work being undertaken, which will only be done during the third year of the proposed programme if approved. As such, the likely first date of the 3D survey being undertaken would be 2024.

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off the South African coast multiple surveys were occurring at the same time, creating greater pressure on South African fisheries. It is important to ensure that an intensive period of seismic surveys is limited. Particularly if there is a risk of the sound source displacing a species from an important feeding or breeding area for a prolonged period, as impacts at the population level interrupting life functions such as spawning or migration patterns, could be significant. Norway as an example has established management actions against seismic surveys on and close to spawning grounds and over well-established migration routes to spawning grounds. Building up in 2011 (13 months of seismic surveys), during 2012 (11 months of surveys), 2013 (29 months of surveys), and tailing off in 2014 (6 months of surveys), these were an abnormally large number of seismic surveys that occurred off the South African coast. These impacted mainly the West and South Coasts, which is where the bulk of South Africa's commercial fisheries sectors operate. Single surveys generally seem to have limited impact, disturbing fish, and perhaps disrupting fishing for a few days, but cumulative impacts from so many surveys need assessment, and better management going forward so that they are spread to reduce negative impacts on sea life.^{118 87}. The Green Connection submits that in the absence of the EIA addressing the cumulative impacts of seismic surveys being conducted in Block 1, the draft EIA report does not contain the information that is necessary for the competent authority to consider and come to a decision on the application. Accordingly, the Green Connection submits that environmental authorisation should be refused.

Furthermore, the proposed year three 3D seismic surveys will be a maximum of 4 months during that year – should these be undertaken. Additionally, it cannot be said with absolute certainty at this point that the proposed Spectrum 2D survey would be granted authorisation. However, should the Spectrum 2D survey proceed, and should the Tosaco 3D seismic survey proceed, then there will be a two year gap between the surveys. Additionally, the proposed Spectrum 2D survey will be undertaken at a low density within the area applied for. Consequently, it is anticipated that the cumulative effect of these surveys will be limited.

Date 2021/10/04 Method Email

Comment

Dear Sinalo Matshona Please find attached comments on the Tosaco Draft EIA Report submitted on behalf of the Green Connection. We would be most grateful if you would confirm receipt of our client's comments by return of email.

Response

Dear Adrian, Thank you for your correspondence and comments. Kindly note that this is an acknowledgement of receipt of your comments on behalf of The Green Connection, please be advised that a formal response will be issued to you by the project team in due time. Should you have any further queries, please feel free to let EIMS know.

Date 2021/10/15 Method Email

Comment

49. A 2015 article by Hawkins et al (which study does not appear to have been considered in the Marine Ecology specialist report) identifies a number of information gaps relating to understanding the effects of noise on fishes and invertebrates." This study notes that the expansion of shipping and aquatic industrial activities has lead to growing concerns about the effects of anthropogenic sounds on aquatic life, including sound from offshore oil exploration and production." Among other things, the study makes the following relevant observations: - There are 'very substantial gaps in our understanding of the effects of these sounds, especially

Response

Both the Fisheries and Marine Ecology Studies are based on an extensive and comprehensive literature source. It is unrealistic to expect every peer-reviewed paper on noise effects ever published to be included in the reviewed literature.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Mr Adrian Pole

for fishes and invertebrates. Currently, it is almost impossible to come to clear conclusions on the nature and level of man-made sound that have the potential to cause effects upon these animals'. - While direct physiological impacts (such as mortality) of seismic impulses are likely limited to species close to seismic airgun arrays, 'research into the effects of acoustic noise exposure has examined only a fraction of fishes or invertebrates'. - Furthermore, '[m]any fishes, and at least some invertebrates, depend on sound to communicate with each other, detect prey and predators, navigate from one place to another, avoid hazards, and generally respond to the world around them.'" - While there is limited data on the effects of sound on mortality of fish, '[t]he greater likelihood is that fishes and invertebrates will be injured by high intensity impulsive sounds with rapid rise times, and that some of these injuries could result in fatalities over the short term or over a longer term if animal fitness is compromised.... If an animal is injured it may be more susceptible to infection because of open wounds or a compromised immune system. Even if the animal is not compromised in some way, it is possible that the damage will result in lowering fitness, reducing the animal's ability to find food or make it more subject to predation'. - Concerns include how anthropogenic sound can alter the general behaviour of fish and invertebrates given that they are 'likely to show behavioural responses to sounds at much greater distances from the sources than those that will result in physical injury. Changes in behaviour could have population level effects as a consequence of keeping animals away from preferred habitats, diverting them from migratory routes..., or interfering with reproductive behaviour'. - In their review of studies on the behaviour of wild fishes in response to sounds, Hawkins et al point out that '[s]uch studies have been confined to very few species and the data are often contradictory. There is a lack of information not only for immediate effects on fish that are close to a source but also on fish that are more distant'. - There 'is a particular need to investigate the propagation of sound and vibration through the seabed, as this is especially relevant to benthic fishes and invertebrates and for exposure to.... seismic airguns', with many fish and invertebrates sensitive to particle motion rather than sound pressure.

Date 2021/10/15 Method Email

Comment

50. An assessment of the impact of seismic surveys on South African Fisheries was also conducted by Russell (this report also does not appear to have been considered in the specialist studies conducted for the EIA). Russel points out that: - Seismic air gun arrays output a rather broadband low-frequency sound (i.e. not a single "tone" or "chord", but rather a noise composed of an undifferentiated range of tones). Peak output is generally in the range of 50Hz, with a secondary peak appearing in the 150-200 Hz range, and continuing decreasing peaks up to almost 1kHz. The end result of all this is that, given the relatively extreme source levels of

Response

The literature used in the specialist studies is primarily from the peer-reviewed literature

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Mr Adrian Pole

airgun sound, even creatures whose hearing is not centred on the lower frequencies can hear and are affected by the sound of seismic surveys.” (emphasis added) 51. Russell goes on to point out that: - Fish hearing via the inner ear is typically restricted to low frequencies, but that fish also receive low-frequency sound through their lateral lines to detect water movement relative to the fish. It is thought that the lateral lines functions in a variety of behavioural contexts, ‘including prey localization, predator avoidance, communication during spawning, and navigation around obstacles. The relationship between the lateral line and the auditory system of fish is not fully understood and continues to be investigated.’ - Fish also respond to pressure gradients with their lateral lines and swim bladders, and have particle motion sensors. These systems are used to respond to subtle phase differences (for example to instantly join in schooling movements or to respond to disturbances caused by a food source). While all sound diminishes with distance, ‘low-frequency sounds diminish more slowly, meaning their impact can last over longer distances than those of high-frequency sounds. Energy at low frequencies can travel great distances. Thus, there can be a larger potential range of impact to organisms whose hearing is tuned to lower frequencies, or who use low frequencies to communicate’. - Fish use sound to communicate, and sound may be related to reproduction and used as an escape response, while sound interception is used respond to the sounds of prey or predators: ‘It is possible that man-made sound could mask or otherwise interfere with fish communication. The consequences of interruption of communication between fishes are essentially unknown’. Furthermore, ‘[s]tudies indicate that behavioural and physiological reactions to seismic sounds may vary between fish species (for example, according to whether they are territorial or pelagic) and also according to the seismic equipment used. Because of the complexity of marine ecosystems, and because sea species respond to sound in ways well beyond current human understanding, ongoing research is required, and a common sense precautionary approach is needed’. - - Frequency ranges are also important, with larger whales ‘likely the most susceptible to direct impact by relatively low frequency output of airguns, since they make the most use of low frequency bands themselves’.

Date 2021/10/15 Method Email

Comment

52. Russell summarises the potential impacts on South African fisheries as follows, with the following negative impacts identified: • Hake – seismic surveys appear not to impact hake long term. With hake there is temporary behavioural disruption, Namibian hake longlines saying that after a seismic vessel goes past, the hake disappears for around three days before they are able to start catching again. • Small pelagic fishery – seismic surveys may have a significant impact, long surveys of around 6 months, and multiple survey cumulative impact particularly in 2013, may have cost the industry a lot of money. • West coast tuna pole and line fishery – impacts

Response

These ‘impacts’ are all unsubstantiated and would need dedicated, structured scientific surveys to collect sufficient data to prove that seismic surveys are in anyway responsible for changes in catches. The natural environmental variability on the West Coast is such that anthropogenic impacts (be they related to hydrocarbon exploration or marine diamond mining) on marine resources are virtually impossible to statistically separate from the natural dynamics. Structured scientific surveys on the potential impacts of seismic acquisition on various fisheries resources was undertaken in the Australian Bight and in all cases no direct link between the seismic surveys

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Mr Adrian Pole

appear to be localized, disrupting fast swimming tunas migration flow by forcing them to move on. But where there are cumulative impacts from repetitive surveys in the same area, as has occurred off Southern Namibia tuna fishing grounds, where catches have severely declined since 2011, and in 2017 dropped off to non-commercial catch rates, there is the ominous possibility that the tunas change their migration path. Environmental factors such as El Nino appear to also have contributed significantly, but combined with regular seismic surveys, the environmental signals are potentially devastating....

- Squid – serious scientific concerns about the impact of low frequency seismic sound on squid. Appears to be a drop in squid jig catches with seismic surveys.
- Rock lobster – no significant drop in catches, but need research on different life history stages, which have different levels of sensitivity to airgun sound. Findings among related species show that egg development among specific crustaceans may be retarded, metabolic rates increased and internal organs damaged following exposure to high amplitude anthropogenic sound.

53. Notwithstanding the lack of baseline data from the area in question and the scientific uncertainty acknowledged in the EIA reports and described in other articles, the EIA rates all potential impacts as (very) low to low (especially after mitigation). In its response to the Green Connection’s comments on the DSR, EIMS simply indicate that the conclusions and significance ratings contained in the specialist reports are in line with similar specialist studies undertaken for seismic surveys over the past 10 years, and that ‘[b]ased on discussions with the relevant specialist and with due consideration of the extent, duration, and magnitude of the proposed exploration activities it is understood that there is adequate information to be able to make a reasonable assessment of the likely impacts’.

54. Notwithstanding the lack of baseline data from the area in question and the scientific uncertainty acknowledged in the EIA reports and described in other articles, the EIA rates all potential impacts as (very) low to low (especially after mitigation). In its response to the Green Connection’s comments on the DSR, EIMS simply indicate that the conclusions and significance ratings contained in the specialist reports are in line with similar specialist studies undertaken for seismic surveys over the past 10 years, and that ‘[b]ased on discussions with the relevant specialist and with due consideration of the extent, duration, and magnitude of the proposed exploration activities it is understood that there is adequate information to be able to make a reasonable assessment of the likely impacts’.

and fluctuating fish catches could be determined. These studies have been cited and referenced in the Marine Ecology study.

Ms Jennifer Olbers

Date	2021/03/07	Method	Email
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Comment

Good day, I would like to register as an I&AP for the TOSACO BLOCK 1 EXPLORATION RIGHT (Ref:1415/GP/cm).

Response

Dear Jennifer, Thank you for your correspondence regarding the above mentioned project. Kindly note that you have been registered on the I&AP project database. As a registered I&AP you

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Ms Jennifer Olbers

will be provided with the opportunity to comment on the Scoping and EIA reports and associated appendices once they becomes available. Should you have any further comments or queries please feel free to contact EIMS.

Mr Willem Louw

Date 2021/02/21 Method Email

Comment

Dear Ms Muthukarapan, I would like to register as Interested and affected party (I&AP) to participate in the EIA for the proposed Tosaco Block 1 Exploration Right EIA Project. Project Ref No. 1415

Response

Dear Mr Louw, Thank you for your correspondence. Kindly note that as a registered I&AP you will be provided with the opportunity to comment on the Scoping and EIA reports and associated appendices once they become available. Should you have any queries or comments please feel free to contact EIMS.

Ms Susanna S

Date 2021/09/16 Method Email

Comment

Good morning, Is it possible that in the future send all communication for attention of the Municipal Manger and email it to postmaster@richtersveld.gov.za that person then will send is to relevant parties. Trust you find this to be in order.

Response

Dear Susanna, Thank you for your correspondence. Kindly note that we are currently sending notifications with regards to the Tosaco Exploration Right EIA Project to the below mentioned email, postmaster@richtersveld.gov.za. Please note that your department for Land-Use Zoning was registered as a Pre-identified Municipality at the inception of the project. May you please clarify if you would like us to remove you on our Interested and Affected Party (I&AP) Database as a contact person for your department and instead send the correspondence only to the email you mentioned below. Kindly note that should we remove you from the database, you will not receive future correspondence with regards to the project.

Date 2021/10/14 Method Email

Comment

Good day I do not have any problem that you also send the email to me, but he reason for this is about the letters addressed to me and unfortunately no one else is allowed to sign it at the post office but I have to do it myself. All correspondence which is for Richtersveld Municipality must be addressed to the Municipal Manager. Trust you find this to be in order.

Response

Dear Susanna, Thank you for your correspondence and clarification on this matter. Kindly note that we will direct any further communication by post for the attention of the Municipal Manager as advised below. Apologies for any inconveniences this might have caused.

Ms Natasha Higgitt

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Ms Natasha Higgitt

Date 2021/03/24 Method Email

Comment

Good morning, Please note that all development applications are processed via our online portal, the South African Heritage Resources Information System (SAHRIS) found at the following link: <http://sahra.org.za/sahris/>. We do not accept emailed, posted, hardcopy, faxed, website links or DropBox links as official submissions. Please create an application on SAHRIS and upload all documents pertaining to the Environmental Authorisation Application Process. As per section 24(4)b(iii) of NEMA and section 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA), an assessment of heritage resources must form part of the process and the assessment must comply with section 38(3) of the NHRA. Once all documents including all appendices are uploaded to the case application, please ensure that the status of the case is changed from DRAFT to SUBMITTED. Please ensure that all documents produced as part of the EA process are submitted as part of the application.

Response

No response required. Project Documents uploaded to SAHRIS

Kgaphola Mashudu

Date 2021/08/11 Method Email

Comment

Good Day Please note that I do not deal with EIA related report, Please send your documents to MS Alexia Hlengani that I copied in this mail for ease referencing.

Response

Dear Mashudu, Thank you for your correspondence and for sharing Ms Alexia's email address with us. Kindly note that Ms Alexia has been registered on the I&AP Database for the project and the below correspondence regarding the EIA Process has already been sent to her as a registered I&AP. Please indicate if you would like to remain on the database for this project and receive further notifications related to the Environmental Authorisation Application Process?

Date 2021/08/11 Method Email

Comment

Noted . Please remove me from EIA related communication

Response

Dear Mashudu, Thank you for your correspondence. Kindly note that you have been removed on the project's I&AP database as requested.

Ms Michelle vd Merwe

Date 2021/08/27 Method Email

Comment

We registered But have no clue how this works and where to go to join this meeting.

Response

A meeting link for joining the meeting was shared with Michelle, to assist with joining the

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Ms Michelle vd Merwe

meeting. Please see below.

Date 2021/08/27 Method Email

Comment

We down loaded the app Still no link to join the meeting

Response

Dear Michelle, Thank you for email. Kindly find the link below to joining the event, alternatively you can check on your calendar for the event and look for the join event link on the body of the event notification. Link for joining the event: https://teams.microsoft.com/l/meetupjoin/19%3ameeting_NDZIMWYwYjltYjA1MCO0NmY4LTlkY2YtYjhkYWMOMmViNzZI%40thread.v2/0?context=%7b%22Tid%22%3a%22e7874eb1-273d-4bee-9dc4-0d8494dbb824%22%2c%22Oid%22%3a%2210ae63c1-352f-4edf-b0cfb0a1958921f8%22%2c%22prid%22%3a%22sU6H5z0n7kudxA2EINu4JA%2ciAKBatbrSU2qAUveW_L7Ag%2cAjAREdV_7C0ONCQrPtNeMIA%2c0QJcZ9INgEGUxaJ_inLmw%2ci23YPcdNgkiPnkWArjRaQ%2c2crz1MxKXLY02vMIDyNQDbwA%2cFWI90moNGs28mBWMOPN8mQ%22%2c%22isPublic%22%3atrue%7d Kindly feel free to let me know if you have any further queries in this regard.

Date 2021/08/27 Method Email

Comment

Please send registration email toThalitavandenberg@gmail.com They were at meeting but did not get the mail.

Response

Dear Michelle, Thank you for sharing Thalita's email with us. Please note that the link for registration has been sent to her.

Reason Nyengera

Date 2021/03/07 Method Email

Comment

Please find attached completed I&AP registration form and questionnaire. We would like to get involved and comment on the possible short-term and long-term direct and indirect impacts of the proposed TOSACO Block 1 (EIMS Ref #: 1415) oil exploration on coastal and pelagic seabirds. Therefore, we request to get registered. We will send our preliminary comments as soon as possible.

Response

Thank you for your registration. Kindly note that you have been registered on the project I&AP database. As a registered I&AP you will be provided with the opportunity to comment on the Scoping and EIA reports for the project once they are made available. Should you have any comments or queries please feel free to contact EIMS.

Lindsey Smith

Date 2021/03/24 Method Email

Comment

Response

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Lindsey Smith

I trust that this email finds you well. Please will you register BirdLife South Africa as an I&AP for this application, as we will be interested to see the assessment documents. I do apologise for only registering now, your email was sent to our junk mail.

Thank you for your correspondence. Kindly note that you have been registered as an I&AP on the project database. As a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA reports once they are made available. Should you have any further comments or queries please feel free to contact EIMS.

Sherelee Odayar

Date 2021/05/04 Method Email

Comment

To Cheyenne Muthukarapan Please see I&AP registration form to register the South Durban Community Environmental Alliance (SDCEA) as an I&AP for the Proposed Tosaco Energy Block 1 Exploration Right Tosaco Energy (Pty) Ltd. Also please see comments on the draft scoping report from SDCEA. A follow up email was sent later in the day: "Please can I get a receipt to say that you have received these comments. "

Response

Thank you for your correspondence. Kindly find attached EIMS response to your comments submitted. Should you have any queries with regards to the attached please feel free to contact EIMS.

Date 2021/10/04 Method Email

Comment

Good Day Please see attached for the comments of the EIA of the Tosaco Energy Block 1 Exploration Right Tosaco Energy (Pty) Ltd by the South Durban Community Environmental Alliance.

Response

Dear Sherelee, Thank you for your correspondence and comments. Please note that this is an acknowledgement of receipt of your comments on the DEIAR. A formal response to the comments will be issued to you in due time. Should you have any further queries, please feel free to contact EIMS.

Elise Tempelhoff

Date 2021/03/17 Method Email

Comment

Will you please register me as an I&AP on this project, please

Response

Thank you for your correspondence. Kindly note that you have been registered on the project I&AP database. As a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA Reports when they become available. Should you have any queries or comments please feel free to contact EIMS.

Date 2021/03/24 Method Email

Comment

Dear Cheyenne, Thank you for your rapid response. What documents are available at the

Response

Kindly find attached the BID for the project. Please note that the Scoping Report and associated

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Elise Tempelhoff

moment? Please send them to me for background information.

appendices will be made available in due course. As a registered I&AP you will be provided with the opportunity to comment on the Scoping and EIA reports and associated appendices.

Date 2021/04/01 Method Email

Comment

Please be so kind and send me the scoping report.

Response

Thank you for your correspondence. Kindly find attached the Scoping Report as requested. The associated appendices can be downloaded from the EIMS website: <https://www.eims.co.za/2021/03/25/1415-tosaco-exploration-right-application/> Should you have any further comments or queries please feel free to contact EIMS.

Date 2021/08/27 Method Email

Comment

Good morning, is the virtual meeting still on this afternoon? If so, please send me the link.

Response

Dear Elise, Thank you for your correspondence. Kindly note that the virtual meeting will still be happening today at 13:00 on Microsoft Teams. Please register for the meeting on the link below to reserve your space. Webinar Link: https://teams.microsoft.com/registration/sU6H5z0n7kudxA2EINu4JA,iAKBatbrSU2qAUveW_L7Ag_AjAREdV7C0ONCQrPt_NeMIA,0QJcZ9INgEGUxaJ_inLJmw,i23YPcdNgkiPnkWArjRaQ,rz1MxKXLY02vMIDyNQDbwA?mode=read&tenantId=e7874eb1-273d-4bee-9dc4-0d8494dbb824 Kindly let EIMS know if you have any issues or queries in this regard.

Date 2021/10/06 Method Email

Comment

Dear all, When is the closing date for affected parties' response?

Response

Dear Elise, Thank you for your correspondence. Kindly note that the review and comment period for the Draft Environmental Impact Assessment Report ended on Monday the 04th October 2021. The project team is currently preparing the EIA report for submission to the Competent Authorities. May I kindly ask that you send us any comments that you may have, so that we may include these in the EIA report for the Competent's Authority consideration in their decision-making process. Should you have any queries, please feel free to contact EIMS.

Date 2021/10/06 Method Email

Comment

Thank you, Sinalo My comments are in your minutes.

Response

Dear Elise, Thank you for your correspondence. Kindly note that the review and comment period for the Draft Environmental Impact Assessment Report ended on Monday the 04th October 2021. The project team is currently preparing the EIA report for submission to the Competent

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Elise Tempelhoff

Authorities. May I kindly ask that you send us any comments that you may have, so that we may include these in the EIA report for the Competent's Authority consideration in their decision-making process. Should you have any queries, please feel free to contact EIMS.

Date 2021/10/06 Method Email

Comment

Thank you, Sinalo My comments are in your minutes.

Response

Dear Elise, Thank you once again for your correspondence. Kindly note that your comments were noted and will be submitted to the Competent Authority for their consideration in the decision-making process.

Alistair McInnes

Date 2021/10/15 Method Email

Comment

1. BirdLife South Africa would like to take this opportunity to comment on the Environmental Impact Assessment Report. Marine seismic surveys explore subterranean geological features for petroleum, natural gas, and mineral deposits. This activity is going to produce intense high-energy sounds directed at the sea floor with known impacts on invertebrates, fish, marine mammals, and seabirds (Pichegru et al. 2017, Duarte et al. 2021). A recent study of endangered African Penguins from their largest colony globally at St Croix Island in Algoa Bay showed a strong avoidance of their preferred foraging areas during seismic activities, foraging significantly further from the survey vessel when in operation, while increasing their overall foraging effort (Pichegru et al. 2017). The report states that over 5000 km of 2D and 750 km2 of 3D surveys have already been completed. Information on the observations and impacts from the previous surveys in licence block 1 (e.g. Marine Mammal Observer reports) should be provided as this will give an indication of the numbers of marine animals encountered in the past. Birdlife south Africa is concerned about the potential negative influence of direct and indirect impacts of seismic survey activities on seabirds. Our general concerns include: • The list of potential seabird species that are likely to be affected should be updated using species in Table 1 below. • We question whether the indirect impact on seabirds or the impact of behavioural avoidance, particularly Cape Gannets and African Penguins, would be "very low" particularly if effects persist for the duration of the survey (4 months). African Penguins are particularly vulnerable to prey scarcity while they are foraging to gain weight before and after the moult period. After the moult, they need to regain condition immediately, and would likely not survive 4 months if prey was displaced from their usual foraging areas. Unpublished data collected by BirdLife South Africa shows that African Penguins travel widely during the pre- and post-moult periods with

Response

Thank you for your comments. It is understood that at least some data from Marine Mammal Observers and other studies have already been used to update the baseline description and considered as part of the information described in this EIA. The list of birds will be updated according to the table provided. We have communicated the concern regarding the rating of the indirect impact on seabirds to marine ecologist and the report has been updated accordingly.. With reference to section 3.3.3.5 of the Marine Ecological Assessment, it is understood that most of the breeding seabird species forage at sea with most birds being found relatively close inshore (10-30 km). Cape Gannets, however, are known to forage within 200 km offshore, and African Penguins have also been recorded as far as 60 km offshore. Block 1 lies well to the north of South African West Coast gannet foraging areas (Figure 24 of the Marine Ecological Assessment). With reference to the impact on fish egg mortality and viability, as reported in the Marine Ecological Assessment, numerous studies have been undertaken experimentally exposing the eggs and larvae of various zooplankton and ichthyoplankton species to airgun sources. These studies generally identified that for a large seismic array, mortalities and physiological injuries occurred at very close range (<5 m) only. For example, increased mortality rates for fish eggs were proven out to ~5 m distance from the air guns. A mortality rate of 40-50% was recorded for yolk sac larvae (particularly for turbot) at a distance of 2-3 m, although mortality figures for yolk sac larvae of anchovies at the same distances were lower. Yolk sac larvae of cod experienced significant eye injuries (retinal stratification) at a distance of 1 m from an air gun array, and damage to brain cells and lateral line organs at ><2 m distance from an airgun array. Increased mortality rates (10-20%) at later stages (larvae, post-larvae and fry) were proven for several species at distances of 1-2 m. Changes have also been observed in the buoyancy of the organisms, in their ability to avoid

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Alistair McInnes

post-moult birds especially travelling up the West Coast. Immature birds have also been shown to forage on the West Coast (Sherley et al. 2017) • South Africa is internationally obliged to prohibit deliberate disturbance that would be significant for the conservation of populations of certain seabird species – including both the Cape Gannet and the African Penguin. • Considering the current low biomass levels of sardine/pilchard, we are concerned about potential negative impacts of the surveys on eggs and larvae of this species in particular. Sardine/pilchard and anchovy are the primary prey of three of the five most threatened coastal seabird species, African Penguin, Cape Gannet and Cape Cormorant, and they are also important prey for many of the pelagic species included in Table 1. There is evidence of decreased fish egg viability and increased embryonic mortality when exposed to high sound levels (Weilgart 2013) and the seismic surveys should therefore avoid the spawning areas of small pelagic fish species. • Large numbers of pelagic seabirds are frequently attracted to fishing vessels (e.g. demersal trawl and pelagic longline), therefore if fishing vessels are in the area the density of pelagic birds may increase. • Furthermore, we would also like to highlight the pelagic seabird species with which the proposed seismic survey area intersects with tracking data currently available to BirdLife South Africa (Appendix 3). These species include: the Atlantic Yellow-Nosed Albatross *Thalassarche chlororhynchos* (breeding), the Great Shearwater *Ardenna gravis* (breeding and non-breeding), the Northern Giant Petrel *Macronectes halli* (breeding), We do not have tracking data available for all species listed in Table 1 and therefore request that the applicant considers the potential impacts of the proposed seismic activities on all species listed in Table 1. All pelagic species listed here are wide-ranging and are likely to traverse the proposed site. In line with the precautionary principle, their presence in the proposed site should therefore be assumed for the purposes of the impact assessment.

predators and effects that affect the general condition of larvae, their growth rate and thus their ability to survive. From a fish resource perspective, these effects may potentially contribute to a certain diminished net production in fish populations. However, it has been calculated that under the “worst case” scenario, the number of larvae killed during a typical seismic survey was 0.45% of the total larvae population. When more realistic “expected values” were applied to each parameter of the calculation model, the estimated value for killed larvae during one run was equal to 0.03% of the larvae population. If the same larval population was exposed to multiple seismic runs, the effect would add up for each run. With regards to fishing vessels attracting seabirds, it should be noted that during the seismic survey, an exclusion zone will be applicable during which no other vessel may be present. As a result, fishing vessels will not be present and the amount of seabirds attracted as a result of fishing vessels is expected to be very low. Furthermore, it has been included in the EMPr that an area of radius of 500 m from the centre of the airgun array be scanned (visually during the day) by an independent observer for the presence of diving seabirds (and in particular feeding aggregations of diving seabirds) prior to the commencement of “soft starts” and that these be delayed until such time as this area is clear of seabirds. Additionally, any attraction of predatory seabirds (by mass disorientation or stunning of fish as a result of seismic survey activities) and incidents of feeding behaviour among the hydrophone streamers should be recorded by an onboard Independent Observer; and airgun firing should be terminated if, in the unlikely event, mass mortality of seabirds is observed as a direct result of

Date 2021/10/15 Method Email

Comment

2. Birdlife South Africa is in favour of applying environmental impact assessments and appropriate risk mitigation strategies to all prospective seismic activities. These mitigation measures should include: • Conducting the activity in an area outside the foraging ranges of sensitive seabird species, such as threatened species that dive to catch their prey, e.g. African Penguins, Cape Gannets and Cape Cormorants. • Conducting the activity in the season that minimises overlap with surveys and concentrations of sensitive species. • Independent Observers or Marine Mammal Observers with experience in seabird, marine mammal and turtle identification must be stationed on the vessel. Observers should be proficient in spotting seabirds on the sea surface as well as flying. • “Soft-start” procedures where the intensity of the airgun blasts is gradually increased. Soft-start procedures should be implemented at the start of surveying and when there has been a break for longer than 20 minutes: ramping up sound

Response

Thank you for your comments. As discussed above, with reference to section 3.3.3.5 of the Marine Ecological Assessment, it is understood that most of the breeding seabird species forage at sea with most birds being found relatively close inshore (10-30 km). Cape Gannets, however, are known to forage within 200 km offshore, and African Penguins have also been recorded as far as 60 km offshore. Block 1 lies well to the north of South African West Coast gannet foraging areas (Figure 24 of the Marine Ecological Assessment). The seasonality of the sensitive species has been considered and the appropriate time of the year proposed. These mitigation measures will be considered and included as appropriate.

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Alistair McInnes

levels, starting pile driving sessions at less than full power. The first blows are probably the most devastating to unsuspecting wildlife in the vicinity. Therefore, if such wildlife can be scared off to a safe distance by starting up pile driving sessions using less than full blowing power, lethal effects may be avoided. • For diving seabirds, cetaceans, other marine mammals and turtles, the soft-start procedure should be delayed until the animals have left the zone of adverse noise impacts. • Seismic survey operations should be temporarily suspended if the following are witnessed by the observer: any observations of African Penguins, plunge-diving Cape Gannets, diving Cape Cormorants, diving petrel and shearwater species, and all aforementioned species observed on the sea surface. • Operations should be suspended if any mortality or injury of seabirds, mammals, or turtles is observed. • Avoidance of key small pelagic fish (especially sardine/pilchard) spawning areas.

Date 2021/10/15 Method Email

Comment

While we recognise and appreciate that some of the above-mentioned mitigation measures are included in the draft Environmental Management Plan, we strongly urge that all of them be incorporated into the final version.

Response

Thank you for your comments.

Trevor Wilson

Date 2021/03/07 Method Email

Comment

Kindly be informed the intended area of exploration falls within the scope of the Large Pelagic long line operations. Be advised Tuna long liners who operate in the area, once their fishing gear is deployed their lines are naturally exposed to the sea current conditions and may drift uncontrollable in any direction. We trust you will keep us informed of daily planned activities.

Response

Dear Trevor, Thank you for your correspondence regarding the above mentioned project. Kindly note that your initial comments as per below has been passed onto the project team for their consideration. Should you have any further comments or queries please feel free to contact EIMS.

Adeleen Cloete

Date 2021/04/06 Method Email

Comment

Please register me as an I

Response

Thank you for your correspondence. Kindly note that you have been registered on the project I&AP database. Kindly note that the Scoping is currently available for public review and comment until the 29th April 2021. A copy of the report can be downloaded from the EIMS website: <https://www.eims.co.za/2021/03/25/1415-tosacoexploration-right-application/>. Furthermore,

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Adeleen Cloete

please note that public open days will be held next week from 10am to 3pm as per the notification attached. Should you have any comments or queries please feel free to contact EIMS.

Date 2021/05/04 Method Email

Comment

Please find the scoping phase comments attached.

Response

Thank you for the comments on behalf of the Department. Kindly find attached the EIMS response to your comments provided. Should you have any comments or queries please feel free to contact EIMS.

Date 2021/05/04 Method Email

Comment

1.. 1. Background Tosaco Energy (Pty) Ltd (hereafter Tosaco) has applied for an Exploration Right for offshore oil and gas in Block 1, located off the West Coast of South Africa. Environmental Impact Management Services (Pty) Ltd (EIMS) has been appointed by Tosaco to prepare and submit an application for Environmental Authorisation as per the requirements of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended and promulgated under the National Environmental Management Act (Act No. 107 of 1998- NEMA) and the requirements of the Minerals and Petroleum Resources Development Act (Act No. 28 of 2002 – MPRDA). Comments will be from a coastal management (guided by the Integrated Coastal Management Act -Act 18 of 2008, as amended).and scientific perspective respectively.

Response

Thank you for your comment. Comment noted

Date 2021/05/04 Method Email

Comment

2. Coastal Management Comments 2.1 Specialist Studies The specialist studies will include a Marine Ecological Impact Assessment and a Fisheries Impact Assessment to address the key impacts that require further investigation. "The Block 1 application area, and the proposed 3D Seismic Survey, intersects with the Namaqua Fossil Forest Marine Protected Area - The MPA provides evidence of age-old temperate yellowwood forests from a hundred million years ago when the sea-level was more than 200 m below what it is today; trunks of fossilized yellowwood trees covered in delicate corals. As such, it has been recommended that the 3D Seismic area falling within the MPA, as well as the recommended 5 km buffer, be excluded from the 3D Seismic area." I want to reiterate the recommendation that the 3D Seismic area falling within the MPA and the recommended 5 km buffer, be excluded from the 3D Seismic area. It will also be important to continuously consult the Department of Forestry, Fisheries and the Environment, as the competent authority responsible for MPA's

Response

Thank you for your comment. The MPA and buffer zone will be excluded from the 3D Survey area. Please note that the Department of Forestry, Fisheries and the Environment (DFFE) have been registered as a key Interested and Affected Party (I&AP)

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Adeleen Cloete

Date 2021/05/04 Method Email

Comment

2.2. Employment Opportunities "A small amount of skilled employment will be created during the planning and operational phases related to the planning of the survey, and related exploration activities." Ensure that local people are aware of, and considered for, possible opportunities emanating from the project.

Response

Thank you for your comment. As mentioned, the opportunities for employment will be limited for this project and will be limited to skilled employment.

Date 2021/05/04 Method Email

Comment

2.3 Oil Spills The response to an oil spill depends on the tier of the spill-the higher the tier means that more sophisticated equipment is needed to respond to the spill. The Department of Forestry, Fisheries and the Environment has a database of service providers that has the capacity to respond to serious oil spills. It is important to note that unfortunately there are no registered service providers based in the Northern Cape-Tosaco should thus plan accordingly.

Response

Thank you for your comment. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. However, minor spill can still occur and measures to deal with minor spills will be included in the EMPr.

Date 2021/05/04 Method Email

Comment

2.4.1. General Comments In the "Description of the Project Area" it is mentioned that the project takes place adjacent to the Richtersveld and Nama Khoi local municipalities. Please note that Hondeklip Bay and Koiingnaas falls within the Kamiesberg municipality, please include the mentioned municipality in the "project area description".

Response

Thanks for your comment. It is noted that the Block 1 area falls directly adjacent to the Richtersveld and Nama Khoi local municipalities. However, due to the locality and proximity of the 3D Survey area, communities up to Hondeklip Bay were included.

Date 2021/05/04 Method Email

Comment

2.4.2. "Noise Nuisance from Vessel and Helicopter Operations -travel to and from site could result in a localised noise disturbance. The extent of the disturbance would depend on the number of aircraft / vessels involved in the survey but will have a low overall significance." Where will helicopters land? If they land anywhere along the Northern Cape coast please ensure that they are authorised to do so.

Response

Thank you for your comment. The logistics regarding potential flights will be considered during the EIA phase and where required, addressed in the EMPr.

Date 2021/05/04 Method Email

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Adeleen Cloete

Comment

2.4.3. "List of Pre-Identified Organs of State/Key Stakeholders Identified and Notified" Please note that the Northern Cape Department of Environment and Nature Conservation and the Northern Cape Department of Agriculture, Land Reform and Rural Development have merged-effective from 1 April 2021. The new name is: Department of Agriculture, Environmental Affairs, Land Reform and Rural Development "List of Pre-Identified Organs of State/Key Stakeholders Identified and Notified" Please note that the Northern Cape Department of Environment and Nature Conservation and the Northern Cape Department of Agriculture, Land Reform and Rural Development have merged-effective from 1 April 2021. The new name is: Department of Agriculture, Environmental Affairs, Land Reform and Rural Development

Response

Thank you for your comment. Comment noted.

Date 2021/05/04 Method Email

Comment

Hondeklipbaai is a seaside town and has a harbour, which serves fishing and diamond-mining boats. It is also a mariculture (i.e. crayfish) and tourist centre (i.e. scenic drives and 4 x 4 routes). Koringnaas is a mining town for alluvial diamonds. Several mining activities are presently in different phases in this area." (Koiingnaas is the correct spelling of the town). Please fact check the status of both the mentioned marine aquaculture and mining activities-there have been status changes during the past couple of years. Currently there is a fishing co-operative based at the "harbour" in Hondeklip Bay. Also note that you need a permit to do off-road vehicle driving (4x4 driving), it is safer to remove that part of the sentence as to not promote unpermitted off-road driving. Contact Details (for fact checking) (a) Longtime Hondeklipbaai Fishing Primary Co – Operative: Chairperson: Mr. Richard Petrus: lthfcoop18@gmail.com (b) Kamiesberg Municipality Contact Details: Senior LED Officer: Ms. Sarah Cloete: sarahc@kamiesberg.gov.za (c) Namakwa District Local Economic development contact details: Mr. Shaun Abrahams: LED Practitioner: shauna@namakwa-dm.gov.za

Response

Thank you for your comment and the contact details. Thank you for the correction – the Scoping Report has been updated accordingly. The status will be confirmed where possible and updated in the EIA Report.

Date 2021/05/04 Method Email

Comment

3. Comments from a Scientific Perspective 3.1 The information given in the Scoping Report on Cape fur seal breeding colonies and haul-outs in the vicinity of Block 1 is incomplete/out-dated. (e.g. Strandfontein Point is a seal breeding colony, not just a haul out, and the Cliff Point breeding colony (between the Kleinzee and Boegoeberg colonies) is not mentioned. The correct number and locations of breeding colonies and haul outs are indicated in the table below. This is based on observations that has been verified during coastal audits undertaken by the Northern

Response

Thank you for your comment and the contact details. Thank you for the correction – We will convey this information to the Marine Ecologist and update in the EIA Report.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Adeleen Cloete

Cape Department of Environment and Nature Conservation between 2015 and 2020. It is suggested that the locations of these seal breeding colonies in relation to the proposed activities should be indicated on a map in the final EIA report. (Table of names and locations of seal breeding colonies in the Northern Cape provided) (Table of seal haul-out locations in the Northern Cape provided)

Date 2021/05/04 Method Email

Comment

3.2 While a good overview of the South African fisheries sector is given in section 8.5.3 COMMERCIAL FISHING SECTORS, it is recommended that the Impact Assessment also focus on the local importance of Snoek fisheries in Port Nolloth and Hondeklipbaai. In the final EIA, it is requested that the impact of the proposed seismic survey on the seasonal snoek fisheries in these towns be investigated specifically.

Response

Thank you for your comment. We will convey this information to the Fisheries Expert and update in the EIA Report.

Date 2021/05/04 Method Email

Comment

3.3 On the maps indicating spatial distribution of the separate fisheries (figure 49 to figure 69), the block indicating the location of licence block 1 is obscuring and covering all the important spatial fisheries locations that should be indicated. This means that these figures cannot be used for their purpose of evaluating fisheries inside the block where the proposed activities will take place. It is requested that these figures please be given in a revised document or in the final EIA report with the "Licence Block 1" as an outline only, so that it does not cover the fisheries maps underneath.

Response

Thank you for your comment. We will convey this information to the Fisheries Expert and update in the EIA Report.

Date 2021/05/04 Method Email

Comment

3.4 It is suggested that the applicants investigate measures to mitigate the impacts of the noise disturbance caused by the firing of air guns for the seismic surveys on marine organisms. It is suggested that measures such as "soft-start" and the ceasing of seismic activities when marine mammals are observed should be investigated for the EIA study.

Response

Thank you for your comment. Thank you for the correction – We will convey this information to the Marine Ecologist for update where required and details provided in the EIA Report and EMPr.

Mr Dawid Jarobus Markus

Date 2021/10/05 Method Email

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Mr Dawid Jarobus Markus

Comment

Dear Dawid, Thank you for your correspondence and comment on the above mentioned project. Kindly be advised that your comment has been noted by the project team and will be included in the Final Environmental Impact Assessment Report for consideration by the Competent Authority in their decision-making process.

Response

Dear Dawid, Thank you for your correspondence and comment on the above mentioned project. Kindly be advised that your comment has been noted by the project team and will be included in the Final Environmental Impact Assessment Report for consideration by the Competent Authority in their decision-making process.

Annemarie

Date 2021/08/11 Method Email

Comment

Good day Sir/Madam Matshona I refer to your Notification regarding the abovementioned subject and will appreciate it if you could email a copy of the EIA Report for reviewing.

Response

Dear Annemarie, Thank you for your correspondence. Kindly note that the total size of the EIA Report with the associated appendices is too big to be sent through an email, because of that we have uploaded and made the report available on the EIMS Website for ease of access during the public review and comment period. May you kindly access the report on the website through this link: <https://www.eims.co.za/2021/08/02/1415-tosaco-exploration-right-application/>. Please let me know if you have any issues accessing the report through the link and I will do my best to assist you in this regard.

Samantha Theresa Cloete

Date 2021/04/12 Method Email

Comment

Graag verneem ek namens Kleinzee gemeenskap ivm die inligtingsessies wat gehou word in Hondeklipbaai, Alexanderbaai en Port Nolloth. Is dit moontlik dat dit in Kleinzee ook gehou kan word en indien nie kan u vervoer reel dat Kleinzee gaan bywoon in Hondeklipbaai. Graag verwag ek terugvoering in hierdie verband.

Response

Thank you for your correspondence and for taking my call earlier today. As mentioned telephonically, EIMS will host a public meeting in Kleinzee during the EIA phase of the project. Thank you for offering to assist with the arrangements in this regard. Furthermore, please do not hesitate to contact EIMS should you wish to arrange a virtual meeting with the project team to discuss any comments you or the community may have. Alternatively comments can be submitted to EIMS using the contact details below. Please do not hesitate to contact EIMS should you have any comments or queries.

Maia Nangle

Date 2021/08/23 Method Email

Comment

Response

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Maia Nangle

Hi there, I would like to register Masifundise Development Trust as an interested and affected party in terms of the Tosaco application for EIMS REFERENCE: 1415 PASA REFERENCE: 12/3/362.

Dear Maia, Thank you for your correspondence and interest in the project. May you kindly provide me with the relevant contact person's full name and contact details (such as email address, fax, cell phone number and/or postal address for the organisation in order to complete your registration. Should you have further comments or queries, please do not hesitate to contact EIMS.

Date 2021/08/28 Method Email

Comment

Dear Ms Matshona Thank you for the response. Here is the relevant information: Full name: Maia Nangle Organisation: Masifundise Development Trust

Response

Dear Maia, Thank you for providing me with the contact details. Kindly note that you have been registered as I&AP. As a registered I&AP you will be provided with opportunities to participate in the Environmental Authorisation Application Process as they become available. Kindly note that a copy of the Environmental Impact Assessment Report is currently available for review and comment until the 3rd September 2021. Please note you can access the report through the EIMS Website on the link: <https://www.eims.co.za/2021/08/02/1415-tosaco-exploration-right-application/>. Kindly let EIMS know if you have any queries and comments.

Judy Bell

Date 2021/03/24 Method Email

Comment

Please would you register me as an I&AP for the application to explore for oil and gas offshore of N. Cape.

Response

Thank you for your correspondence. Kindly note that you have been registered to the project I&AP database. As a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA reports and associated appendices once they become available. Should you have any further comments or queries please feel free to contact EIMS.

Date 2021/04/01 Method Email

Comment

Thanks for this notification. 13 April 2021: Alexander Bay – Development Centre (Weshoek Straat) 14 April 2021: Port Nolloth – Richtersveld – Town Hall (169 Main Road) 15 April 2021: Hondeklip Bay – Eric Baker – Community Hall (75 Main Road) The activities will have far-reaching impacts that will extend way past the borders of this application, so I'm sure you are aware that you need to make it possible for all those interested in and potentially affected by this inappropriate development to hear the details of the application and ask questions. As we are still officially in the lockdown for covid-19, surely these arrangements should have already been made and communicated far and wide as part of your public participation plan? Please

Response

Thank you for your correspondence. Kindly note that all email addresses copied in this correspondence will be registered on the project I&AP database. Kindly refer to Chapter 7 of the Scoping report for details relating to the Public Participation Process undertaken to date. Kindly note that the Scoping report is currently available for public review and comment until the 29th April 2021. Further to the above please note that I&APs are requested to submit comments or queries to the project contact details as provided below in the signature. Should you wish to have a virtual meeting with the project team please submit a request in writing to EIMS. Please note that the project is currently in the Scoping Phase. All comments and queries received will be

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Judy Bell

would you provide

submitted to the Competent Authority for consideration in their decision- making process. Further opportunities for participation will be available during the EIA phase of the project should the Scoping report be approved. As registered I&APs, you will be notified of the opportunities for participation. Should you have any further comments or queries please do not hesitate to contact EIMS.

Gustav von Mollendorf

Date 2021/03/24 Method Email

Comment

Good day Cheyenne your fax dated 23/02/21 refer. Please send all documents , invitations to meetings etc regarding this application to me.

Response

Good Day Kamie, Thank you for your correspondence. Kindly kind attached the currently available documents for the project. Kindly note that you have been registered on the I&AP database and that as a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA reports and associated appendices once they become available. Should you have any further comments or queries please feel free to contact EIMS.

Date 2021/03/24 Method Email

Comment

Good day Cheyenne did you receive my mail.

Response

Good Day Gustav, Please can you confirm if your received my correspondence with the requested information?

Ruan Brand

Date 2021/04/12 Method Email

Comment

I would just like to follow up with you on the case mentioned in the e-mail thread below. I see that you have a created the case on SAHRIS and that it is currently in the draft phase and not yet submitted. Please let me know if you are having any problems uploading the relevant documents.

Response

Thank you for your patience. Please note that the documents have been successfully uploaded to SAHRIS. Please let me know if you can access the information. Should you have any comments or queries please feel free to contact

Date 2021/08/02 Method Email

Comment

Hi Cheyenne, I just saw the notification for the draft EIA being circulated. Please remember that it must be uploaded to SAHRIS so that we can issue our comment. Have a lovely day further.

Response

Dear Ruan, I trust that you are well. Thank you for your correspondence and a reminder. Please note that the EIA Report and associated appendices has been made available to SAHRIS for review

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Ruan Brand

and comment. Should you have any queries in this regard, please do not hesitate to let EIMS know.

Date 2021/08/03 Method Email

Comment

Dear Sinalo, Thank you kindly for the update. I can confirm that everything is on SAHRIS and I will issue a comment soonest. I hope that you have a lovely week further.

Response

Dear Ruan, Thank you for the confirmation in this regard. Kindly note that it was brought to our attention that we need to include the Khoisan Traditional Leaders as part of the Public Consultation Process for this project. May you kindly indicate if you are aware of any Traditional Leaders in the West Coast of South Africa that we can include on our databases. Your assistance in this regard would be highly appreciated.

Date 2021/08/05 Method Email

Comment

Dear Sinalo, We usually handle offshore developments so my knowledge on traditional leaders is quite limited. I just checked in with a more knowledgeable colleague so my apologies for the delay in my reply. Unfortunately we do not have any direct contact details for traditional leaders in the Northern Cape. We only know of the National Khoi-San Council as a traditional authority. My colleague suggested either contacting The Ministry of Cooperative Governance and Traditional Affairs (COGTA) for information or alternatively talking to Prof David Morris of the Kimberley Museum as his knowledge on Northern Cape affairs is unparalleled (dmorriskby@gmail.com). I hope that this will assist you in getting into contact with the relevant traditional stakeholders.

Response

Dear Ruan, Thank you for your assistance in this regard and your kind suggestions. It is highly appreciated.

Date 2021/08/27 Method Email

Comment

Dear Sinalo, Please note that we have issued our comment on the DEIAR on SAHRIS, but I have also attached it here for your convenience. Could I kindly ask for an update on the status of the FSR? I just want to make sure that it is still in progress as SAHRA still needs to issue a comment on it. If you have any questions relating to the comment on the DEIAR, please feel free to contact me. I hope that you have a lovely weekend.

Response

Dear Ruan, Thank you for your correspondence and my sincere apologies for the delay in responding to your email. Kindly note that your comments on behalf of SAHRA on the DEIAR were noted and will be included in the Final Environmental Impact Assessment Report for submission to the Competent Authority for their consideration in the decision-making process. Kindly note that the Final Scoping Report (FSR) was submitted and accepted by the competent authorities, following this the DEIAR was placed for public review and comment period which will be concluded on the 04th of October 2021. Please note that we are currently working on the FEIAR for submission to the Competent Authorities post the public review and comment period. May you please indicate if we need to add the report to SAHRIS for comments to be issued on it as well or the comments that were issued on the Draft Scoping Report and DEIAR will be

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Ruan Brand

sufficient. Once again my apologies for the delay in responding to your email.

Date 2021/09/28 Method Email

Comment

Dear Sinalo, No worries on the delay. We have also had an incredibly busy heritage month. Please note that SAHRA needs to comment at all stages of the process, including the FSR and FEIAR. This is mainly to ensure that SAHRA's comments and recommendations on the draft reports have been adhered to and included. SAHRA is the relevant commenting authority for NHRA section 38(8) applications. Could you please ensure that the FSR is made available on SAHRIS and when the FEIAR is completed that it is also made available on SAHRIS for this purpose.

Response

Dear Ruan, Thank you for your correspondence. Kindly note that the FSR has been made available on SAHRIS for review and comment. May you kindly check if you can access the documentation and kindly let me know if there are any issues in this regard. Should you have any queries, please feel to let EIMS know.

Date 2021/09/29 Method Email

Comment

Dear Sinalo, Thank you kindly for the notification. The FSR has been uploaded successfully. I will try to issue you a comment ASAP.

Response

Dear Ruan, Thank you for the confirmation. We look forward to receiving your comments in this regard.

Date 2021/10/08 Method Email

Comment

Dear Sinalo, After discussing the matter with my manager, we cannot issue a comment on the FSR as the commenting time period had passed. In the future, please upload all the reports and documents related to the project timeously so that we can issue a comment. Any changes or additions to the project must be uploaded onto SAHRIS so that we can issue a comment. The comments issued on the DEIAR stand, and we look forward to seeing these implemented in the FEIAR. If you have any questions please do not hesitate to contact me.

Response

Dear Ruan, Thank you for the email and once again my apologies for the delay in uploading the documentation on the SAHRIS platform. Once the FEIAR has been completed I will timeously upload this on SAHRIS platform as requested. Should you have further queries please feel free to contact EIMS.

Date 2021/10/27 Method Email

Comment

Tosaco has applied for an Exploration Right for offshore oil and gas in Block 1, located along the West Coast of South Africa. The exploration works programme includes the following: Year Activity 1 • Review of all available technical data: o Geographical Information System (GIS) data; o Geophysical data, geological data, borehole data and log data; o Third party technical reports; • Reprocessing of existing geological/geophysical data. • Preliminary estimation of contingent

Response

SAHRA's comments were noted by the project team and have been included in the Final Environmental Impact Assessment Report for submission to the Competent Authority for their consideration in the decision making process. Further to this the FSR was uploaded to SAHRIS for review and comment. However, due to time limitations SAHRA could not issue a response to the FSR.

Ruan Brand

resources. • Prepare conceptual design and program of future geophysical and geological exploration and appraisal. 2 • Planning and preparation of possible seismic survey. 3 • Possible 2D and/ or 3D seismic survey. • Processing and interpretation of seismic data. • Evaluation and estimation of contingent resources based on new data. The South African Heritage Resources Agency (SAHRA) would like to thank you for submitting the Draft Environmental Impact Assessment Report for public review (DEIAR) under section 38(8) of the National Heritage Resources Act, No 25 of 1999 (NHRA) for the proposed 1415 Tosaco Block 1 Exploration Right in the exclusive economic zone along the Northern Cape Coast, South Africa. Please note the following observations from SAHRA's review of the DEIAR, some of which must be corrected in the final version of the report: The text under section 4.4, on Page 23 of the DEIAR, speaks to Section 34(1) of NHRA, which is a section of NHRA that deals with structures older than 60 years. As the project entails offshore surveying, and there is no structure in the proposed survey area, this is irrelevant. As was mentioned in the comment issued by SAHRA on the Draft Scoping Report (DSR), wrecks, as defined in NHRA, older than 60 years, are deemed archaeological heritage resources and therefore the appropriate section of NHRA to consult when dealing with wrecks is Section 35. This section of the report must be amended to reflect this. Under the same section, on Page 24 of the DEIAR, the sentence, "Section 2.1.4 (referring to NHRA) states SAHRA is the statutory organisation responsible for the protection of South Africa's cultural heritage." It is important to note that there is no Section 2.1.4 in NHRA and that it is Section 13 of NHRA that gives SAHRA its functions, powers, and duties. This section of the report must be amended to reflect the above. Also, on Page 24 of the DEIAR, Section 38(1)(c)(i) of NHRA is mentioned and the text speaks to the notification required for a development or activity that will change the character of a site exceeding 5000 m². SAHRA would like to reiterate that as this project currently only entails surveying, the activity will not be changing the character of a site exceeding 5000 m². However, this application forms part of Section 38(8) of NHRA as the evaluation of the impact of this project is required as part of the National Environmental Management Act 107 of 1998 (NEMA). The DEIAR addresses cultural and heritage resources under section 8.8, on page 135, and although SAHRA is satisfied with the 5 km buffer zone to avoid surveying the Namaqua Fossil Forest Marine Protected Area (MPA), as per the comment issued on the DSR, this section of the EIAR fails to mention any wrecks. The comment issued by SAHRA on the DSR already highlighted this omission. SAHRA therefore reiterates that there are several shipwrecks scattered along the coastline that borders Block 1, with no known shipwrecks in the proposed survey area. However, several vessels have gone missing along the South African coastline and there is the chance that an unknown wreck might be within the proposed survey area. As there will be no exploration drilling which could disturb these potential wrecks, the impact of this phase of the project on wrecks, if there are any, remains minimal. It is nonetheless critical that this information is added to the final version of this report to reflect awareness of SAHRA's requirements regarding wrecks. SAHRA is pleased to see that

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Ruan Brand

section 4.4, on page 24 of the DEIAR, addresses Section 35 of NHRA, with the DEIAR stating that, "...any person who discovers archaeological objects or material (including wrecks) in the course of a development must immediately report the find to SAHRA. No person may, without a permit issued by SAHRA, destroy, damage, excavate, alter, deface or otherwise disturb any archaeological site." However, nowhere in the DEIAR is there a section that deals with the implementation of this measure, should it have to occur. This must be included on page 30, under Table 7, Question 1.5, as it deals with the nation's cultural heritage. Suggested wording to be added is as follows: "Should any archaeological or palaeontological material be discovered during the course of works, this will immediately be reported to SAHRA, and further work which may physically impact such material shall cease and not commence without a permit being issued by SAHRA." SAHRA would like to reiterate, that according to section 35(3) of the NHRA, if any heritage resource is discovered these must be reported to SAHRA immediately. Therefore, survey data, and/or resulting information, that could aid in the discovery of offshore heritage resources, such as shipwrecks, must be shared. SAHRA further notes that no final version of the Scoping Report (i.e., no Final Scoping Report [FSR]) has been uploaded to the case on SAHRIS for comment. Please note that all updates and/or changes to the project, supporting documentation, correspondence, reports, or any other work relating to the project must be uploaded to the case on the South African Heritage Resources Information System (SAHRIS) to provide SAHRA with the opportunity to comment. SAHRA does not accept emailed documents or hard-copy documents received via post. Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Ms Sinazo Mnyaka

Date 2021/05/03 Method Email

Comment

1. Section 3.3: Under the description of proposed activities, it is indicated that the area for the proposed 3D seismic survey is approximately 1 340 km², while the in the Environmental Authorisation form, it is specified that it is approximately 1000 km². Kindly align the two so that you provide both the Agency and I&APs with the closest estimate of the proposed survey area. Furthermore, it is indicated that the proposed survey would use a single hydrophone streamer. This is commonly used for 2D surveys, while 3D surveys commonly use multiple streamers. You are requested to amend reference to the use of a single streamer to multiple streamers.

Response

Thank you for your comment. At the time of the submission of the application, it was the understanding that the area was approximately 1 000 km² in extent. However, it has been confirmed that the proposed survey area will be approximately 1 340 km² in extent. The reference to the single streamer has been updated to multiple streamers.

Date 2021/05/03 Method Email

Comment

Response

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Ms Sinazo Mnyaka

2. Section 4.3, Table 5: You have provided an incorrect activity number for the main activity, which should be activity 18 of the Listing Notice 2. Please correct the activity number so that it can match the correct description of the activity provided.

Thank you for your comment. The activity number has been updated.

Date 2021/05/03 **Method** Email

Comment

3. Section 6: a) The considered project alternatives are noted, it is suggested that other alternatives such as technology are considered and assessed; and b) It is also noted that no alternatives will be considered during the EIA phase, it is suggested that a no-go alternative be considered.

Response

Thank you for your comment. Technology alternatives will be considered further in the EIA Phase, in addition to the No-Go alternative.

Date 2021/05/03 **Method** Email

Comment

4. Section 7.11: The DSR has referred to the government authorities under this section but the listed institutions are not all government authorities or institution. It is suggested that this section is amended to reflect the correct information.

Response

Thank you for your comment. This section has been updated to refer to Pre-identified Organs of State/ Key Stakeholders .

Date 2021/05/03 **Method** Email

Comment

5. Reporting and notification: Where relevant, you are requested to separate roles of the Agency from the competent authority's for instance some notifications are made to the Agency as opposed to the competent authority.

Response

Thank you for your comment. Where relevant, the separate roles of the Agency and the DMRE as the Competent Authority have been recognised and detailed .

Date 2021/05/04 **Method** Email

Comment

Kindly receive the attached comments letter for your consideration.

Response

Thank you for your correspondence. Kindly find attached the EIMS response letter. Should you have any queries please feel free to contact EIMS.

Date 2021/05/27 **Method** Email

Comment

Dear Mr Kriel Kindly receive attached letter for your attention.

Response

Dear Sinazo, Thank you for the letter. We confirm receipt.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Ms Sinazo Mnyaka

Date 2021/08/03 Method Email

Comment

Dear Miss Matshona Please receive attached correspondence for your attention.

Response

Dear Sinazo, Thank you for your correspondence. Kindly note that your attached letter has been received and noted. Should you have further queries in this regard, please feel free to let EIMS know.

Date 2021/08/03 Method Email

Comment

Dear Miss Matshona Please receive attached correspondence for your attention.

Response

Dear Sinazo, Thank you for your correspondence. Kindly note that your attached letter has been received and noted. Should you have further queries in this regard, please feel free to let EIMS know.

Date 2021/08/24 Method Email

Comment

1. Section 1, heading 1.2: The requirement for the proponent or applicant to appoint an independent EAP is prescribed in regulation 12. Regulation 13 mainly stipulate the general requirements of EAPs and specialists.

Response

Thank you for your comment. This paragraph has been updated to reflect Regulation 12 as the requirement to appoint an independent EAP.

Date 2021/08/24 Method Email

Comment

2. Section 2, Table 2: The area of the proposed 3D survey indicated in table 2 is 134 562 ha, while 1340 km2 is indicated in the scoping report and other parts of the DEIAR. For consistency, it is recommended that same units are used throughout the document.

Response

Thank you for your comment. The area of 134 562 ha has been used throughout the document.

Date 2021/08/24 Method Email

Comment

3. Section 4.3, Table 5: Activity 22 of listing notice 1, which was included in the scoping report is not included in the current report. If the intention is to exclude it, you will be required to amend the EA application form submitted.

Response

Thank you for your comment. Activity 22 of Listing Notice 1 was excluded from the EIA Report due to the fact that this activity was deemed to not be applicable to the development. The activity was not specifically applied for in the EA Application Form and it is thus understood that that there is no need to amend the EA Application Form.

Date 2021/08/24 Method Email

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Ms Sinazo Mnyaka

Comment

4. Table 7: 2.5.4 – the response provided is not aligned to the question on how does the proposed activity compliment other uses in the area. Table 7: 2.5.13 – the response should be on whether the activity applied for has any socio-economic benefits regardless of its location. Table 7: General comment on the table: in answering some of the questions, the EAP keeps on alluding to the fact that the proposed exploration activities do not include drilling activities, it is suggested that this is avoided and responses must be solely based on the activities being assessed. By referring to drilling activities, the EAP is providing or creating negative impression regarding drilling activities.

Response

Thank you for your comment. This response has been updated in the EIA Report. Thank you for your comment. This response has been updated in the EIA Report. Thank you for your comment. References to the exclusion of drilling activities have been removed from the table.

Date 2021/08/24 Method Email

Comment

5 Section 6.2: The NEMPAA does not prescribe a buffer of 5 km from the marine protected area. Likewise, Regulations for the Management of the Namaqua Fossil Forest MPA do not prescribe any buffer zone around the MPA. It is recommended that the statement referring to a 5km buffer zone be amended reflecting that the buffer zone is a recommendation by the EAP or Specialist, supported by the rationale behind it.

Response

Thank you for your comment. The inclusion of the buffer zone is not specifically identified in the Regulations for the Management of the Namaqua Fossil Forest Marine Protected Area (2019). However, as a surrogate and following the risk averse approach, the EAP recommended that the 5 km trigger value included in the EIA Listing Notice 3 areas requiring environmental authorisation be adopted for this application.

Date 2021/08/24 Method Email

Comment

6. Regulations 4 and 5 of the Regulations for the Management of the Namaqua Fossil Forest MPA prescribe general restrictions and use of vessels within the MPA. It is recommended that the prescribed restrictions are considered in the EIAR and EMPr.

Response

Thank you for your comment. This has been considered and included in the relevant sections of the EIA Report and EMPr.

Date 2021/09/01 Method Email

Comment

Good afternoon GP Kindly receive the attached letter for your consideration.

Response

Dear Sinazo, Many thanks for the letter. It is much appreciated.

Briege Williams

Date 2021/04/12 Method Email

Comment

A colleague of mine has forwarded the above case onto me . As this is an offshore application it

Response

Thank you for your correspondence below. Kindly note that a case will be created for the project

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Briege Williams

falls under the remit of the Maritime and Underwater Cultural Heritage unit at SAHRA who will issue a comment for the case regarding any impacts on maritime heritage. Can you please create a case on SAHRIS and upload the relevant documents, I will then assign myself as case officer and issue a comment. Please can you acknowledge receipt of my below email and let me know when you have created the case on SAHRIS as requested.

in due course and you will be notified of its availability as soon as possible. My apologies for the delay in responding to you.

Mr Warren Federreks

Date 2021/08/24 Method Email

Comment

Morning To Whom it may concern.. I received an SMS yesterday inviting me to a virtual on Friday the 27th at 13:00 to 14:30... I would like to ask if possible to move time to 10:00 if possible...

Response

Dear Warren, Thank you for your correspondence and interest in the meeting. Please note that it is unfortunate that we cannot change the time of the meeting at this stage as the presenters (such as the specialist team) have confirmed that they would be available only during that time on the date. In addition to that please note that a notification has already been sent to registered Interested and Affected Parties with available contact details to make them aware of the time and date hence it would be impossible to change the time. Kindly note that your participation in the process is important to us, and we will therefore try our best to record the session and make it available to you afterwards if you cannot attend on the scheduled time. Should you have further queries please feel free to let EIMS know.

Metzi Van der Merwe

Date 2021/10/14 Method Email

Comment

Dear Mr Matshona I got this from the complainant en August: Dear Metzi Local communities in the Northern Cape say they are concerned because many were not informed about the information sessions being hosted by the Environmental Impact Management Services (EIMS), this week. This forms part of the public participation aspect of the Environmental Authorisation (EA) application process for the proposed Tosaco Block 1 Exploration Right EIA project, located offshore extending from Alexander Bay to approximately Hondeklip Bay. According to local activist Andy Pienaar, "Our communities feel that their right to information, and the right to be consulted were not respected. EIMS should have done a better job informing the people. We found out about the meeting through our interaction with the Green Connection's Community Outreach Coordinator. Only a few people were informed, while the wider public were excluded." The Green Connection's Community Outreach Coordinator, Neville van Rooy says that communities in Port Nolloth, for example, only heard about the meeting there the day

Response

Dear Metzi, Thank for you correspondence and for the comments provided. Kindly note that this is an acknowledgement of the comments received and a formal response from the project team will be provided to you in due course. Should you have any further queries or comments, please feel free to let EIMS know.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Metzi Van der Merwe

before the meeting was to be held. I spoke to a representative of the community, Andy Pienaar, who also complained that the information from you were not readily available and also in English which they do not understand that well. Can you please respond.

Date 2021/10/14 Method Email

Comment

Dear Mr Matshona I got this from the complainant en August: Dear Metzi Local communities in the Northern Cape say they are concerned because many were not informed about the information sessions being hosted by the Environmental Impact Management Services (EIMS), this week. This forms part of the public participation aspect of the Environmental Authorisation (EA) application process for the proposed Tosaco Block 1 Exploration Right EIA project, located offshore extending from Alexander Bay to approximately Hondeklip Bay. According to local activist Andy Pienaar, "Our communities feel that their right to information, and the right to be consulted were not respected. EIMS should have done a better job informing the people. We found out about the meeting through our interaction with the Green Connection's Community Outreach Coordinator. Only a few people were informed, while the wider public were excluded." The Green Connection's Community Outreach Coordinator, Neville van Rooy says that communities in Port Nolloth, for example, only heard about the meeting there the day before the meeting was to be held. I spoke to a representative of the community, Andy Pienaar, who also complained that the information from you were not readily available and also in English which they do not understand that well. Can you please respond.

Response

Dear Metzi, Thank you for your correspondence once again, as per our previous email please see a formal response to your comments below: EIMS would like to point out that EIMS undertook several physical public open days in the towns along the coast with the intention to physically engage the local communities and present the findings of the EIA to them. Meetings were undertaken in Alexander Bay, Port Nolloth and Hondeklip Bay during April 2021, and in Alexander Bay, Port Nolloth, Kleinsee and Hondeklip Bay during August 2021 in order to include I&APs from those areas. During each of the meetings the information was communicated in Afrikaans, and explained in a non-technical manner whenever required. It should be noted that at the beginning of the project an initial call to register phase was undertaken by the EAP, and that this involved putting up site notices in the local towns and distributing notices to properties adjacent to the application area. On these notices, the public was asked to register as I&APs for the EIA project. The EAP undertook to register the people who requested and recorded their concerns and comments during the Scoping Phase and attended the first public open days held during April 2021. Thereafter, the EAP has engaged with the registered I&APs. EIMS would still accept any further registration and comments for new I&APs. However, the requirements set out in the National Environmental Management Act (Act 107 of 1998 – NEMA) and the EIA Regulations, 2014 as amended, have been followed during the process. Following the meetings in August, a summary of the EIA was provided in Afrikaans and English to all registered interested and affected parties. Additionally, a virtual meeting was held on 27 August 2021 in response to certain stakeholders' requests who could not attend the physical open days and as such the meeting was meant to include a larger audience and to augment the physical meetings. It should be noted that owing to the requests from the fishing communities, EIMS applied for an extension of the EIA timeframe in order to specifically meet with these communities and fishing co-operatives. These meetings were held in Port Nolloth, Kleinsee and Hondeklip Bay during September 2021 and served to present the findings directly to the fishing communities and co-operatives and also to gather information on where these communities undertook their fishing activities, with the view of augmenting the information in the EIA Report. These meetings were attended by the fisheries specialist that compiled the fisheries mapping and report. Considering the above, EIMS is of the opinion that the stakeholders have had sufficient opportunity to obtain the required information and to submit their comments in this regard. Should you have any further queries and comments, please feel free to let EIMS know.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Patrick Dowling

Date 2021/08/06 Method Email

Comment

Thank you for this Ms Matshona The notice does not make it clear what is being explored. I presume it is gas. This is a fossil fuel. Our organization does not support the pursuit of any new non-renewable energy resources, especially those which will compound climate change related problems which are increasing in number and intensity every year as I'm sure your company is aware. Do you or your company not believe climate science and its predictions about the impacts on the natural environment and human society or think they are not that serious or will be resolved by as yet untested technologies? The SA government has signed on to both the sustainable development goals (one of which is clean energy) and the Paris agreement which obliges every country to continue decreasing its CO2 equivalent emissions and upping its ambitions to help the world get to carbon neutrality by 2050 and limit warming to 1,5 degrees Centigrade. It's bad enough that SA continues to rely heavily on coal to provide electricity without it encouraging exploration for new sources of hydrocarbons. Please register WESSA as an IAP and do try to have a zoom or teams meeting that will not require a 1000 km, polluting journey to attend.

Response

EIMS called Mr Dowling to discuss the scope of the project with him. Further to this Mr Dowling was invited to the Virtual Public Meeting held on the 27th August 2021 and his comments were further discussed and addressed during the meeting as presented in Appendix B9 virtual public meeting minutes, of the Public Participation Report.

Desmond Mathew

Date 2021/04/29 Method Email

Comment

1. INTRODUCTION The South Durban Community Environmental Alliance ("SDCEA") is a non-governmental organisation representing 17 community and environmental organisations concerned with environmental justice and sustainable development in South Durban and KwaZulu-Natal. SDCEA represents vulnerable and disadvantaged persons whose lives and livelihoods depend on the protection of the coastal ecosystems of KwaZulu-Natal, in the vicinity of Durban. Its members include the following institutions: a. BioWatch b. City of Love Ministries c. Poor Flat Dwellers Association d. Airport Farmers Association e. Merebank Ratepayers Association f. Silverglen Civics g. Anti-Pollution Watchdogs h. KZN Subsistence Fisherfolk Forum i. Christ the King Church j. Earthlife Africa k. Athlone Park Residence Association l. Merebank Civic Committee m. Bluff Ridge Conservancy n. Urban Futures Centre o. Chatsworth Civics p. Active Citizens Movement q. Ubunye Bamahostela r. Wentworth Development Forum s. Clairwood Social Forum t. Clairwood Ratepayers Association u. Treasure Beach Environmental The SDCEA has for the last two decades participated in forums for the improvement of environmental management in KZN and in particular, in the industrial areas south of Durban. SDCEA has considered the Draft Scoping Report and Plan of study for EIA

Response

Comment noted. The SDCEA has been registered as an I&AP for this application.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Desmond Mathew

dated March 2020, and submits the comments that follow, for your consideration.

Date 2021/04/29 **Method** Email

Comment

2. Impacts of Offshore Oil and Gas Drilling Impact on the communities, people and environment When oil spills occur they can bring catastrophic harm to marine life and devastating losses for local businesses. Even routine exploration and drilling activities bring harm to many marine species. Expanded offshore drilling poses the risk of oil spills ruining our beaches, bringing harm to those who live, work and vacation along the coasts, as well as harming habitats critical to plants and animal species. Oil spills can quickly traverse vast distances. Exploration of oil and gas presents multiple forms of environmental degradation. Oil pollution also damages fishing equipment and pollutes drinking water in wells. Oil spills and waste dumping have also seriously damaged agricultural land. Long term effects include damage to soil fertility and agricultural productivity, which in some cases can last for decades. Economically, the costs of those products become exorbitant given the law of supply and demand. The negative impact of environmental consequences of the oil industry activities are mainly localized within the host communities. However, some of the effects have trans-boundary implications. Gas flaring is a contributing factor to global warming and these are risks no community is willing to take. How will the developer mitigate any oil spills? We require an in-depth and adequate oil spill contingency plan.

Response

Thank you for your comment. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. The scoping report has been prepared in accordance with the NEMA EIA Regulations and assesses the impacts of the specific exploration activities being proposed. Section 9 of the Scoping Report presents the impacts identified, which includes small scale spills associated with the proposed seismic exploration activities.

Date 2021/04/29 **Method** Email

Comment

3. Impact on fisherfolk These developments will not only cause catastrophic destruction with the above-mentioned impacts but will also destroy livelihoods to over 50 000 subsistence fisher folk who eke out a living daily. When seismic tests are conducted, they clearly have an impact on marine life. The fish are either killed or forced to leave the area. There will be no fish for the subsistence fishermen, who fish areas all along the coast. This impact will increase poverty and lead to more people joining unemployment line. Thereby increasing to the millions of people who are unemployed and this development will require specific skills which the majority of the population do not possess therefore there is no job creation in these projects. In the public participation process, this group of marginalised fisherfolk must be given notice and opportunity to comment and voice their concerns. In the event of an incident like an oil spill, how will the developer compensate the fishers who fish in that area? A social impact study of how the livelihoods of fisherman will be affected must be conducted.

Response

Thank you for your comment. As noted in the response to item 1, the application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. Section 9 of the scoping report presents the impacts identified. The potential impact on marine fauna and the local fisheries has been included. In terms of the seismic surveys proposed, the probability of fish and other animal deaths were considered to be very low as per the details of the impacts described in the Draft Scoping Report and specialist studies. Furthermore, the disturbances are anticipated to be of local extent, low magnitude and temporary in nature. The impact on the fishing communities was also assessed. For most fisheries sectors, the effects of acoustic disturbance on catch rates would be considered to be of overall negligible significance. However, in the case of the Tuna Pole Fishery, Netfish, Demersal Longline and Fisheries Research sectors, the spread of sound into fishing grounds may affect catch rates and therefore the overall significance of the survey impact on these sectors has been assessed to be low. The public participation process has included notification and consultation with the

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Desmond Mathew

fisheries industries. Given the above, the impact on fisheries is deemed to be of low significance, the need for a social impact assessment is not considered to be required at this stage.

Date 2021/04/29 Method Email

Comment

4. Emissions to air The oil and gas industry is a significant source of greenhouse gas emissions as well as toxic volatile organic compounds (VOCs). VOC in combination with NOx contribute to the formation of ground-level ozone and is a known causal agent of acid rain. The atmospheric pollution will have measurable impacts on the surrounding ocean but also become potentially entrapped in air masses moving towards the coastline where it will be deposited as acid rain. The drilling of wells and production process require vast amounts of energy usually provided by the burning of gas and diesel. The impact of this activity needs to be accurately assessed in terms of the tons of fuel burnt and hydrocarbons released. Assuming that oil or gas is discovered then this would no doubt need to be flared off until such time as it can be capped and processed. During this time vast quantities of particulate matter and volatile organic compounds will be released into the atmosphere, indeed continuing throughout the production process. In addition the associated fugitive emissions from retrieved product are an additional source of toxic. The developers need to conduct a risk assessment and make available the air emissions that will be emitted during all phases of this development.

Response

Thank you for your comment. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a significant release of greenhouse gases. . As such, the potential impact of emissions to the atmosphere during seismic activities is limited to the survey area, is of a low intensity, and is considered to have a very low significance, prior to implementation of mitigation measures as well as having a very low final significance.

Date 2021/04/29 Method Email

Comment

5. Impacts on the Marine Ecosystem Exploratory drilling may impact marine mammals based on disturbance by sound emitted during drilling, during seismic profiling of the well, and from support vessels or aircraft. Drilling can also result in oil spills, which can affect marine mammals directly by contact, inhalation, or ingestion, or indirectly by affecting marine mammal prey or habitat. Sea birds are attracted to offshore drilling platforms by lights, burning flares and human food that can be scavenged. Birds are killed or injured after colliding with the structures, becoming contaminated with oil and related chemicals, and even being burned by flares. Birds' feathers can get coated with oil, preventing them from being able to keep warm and reducing their ability to float. Roughly 200,000 migratory birds are killed each year near offshore drilling rigs in the Gulf of Mexico. They often fly circles around platforms for hours at a time, exhausting themselves or colliding with platforms or other birds. Deep-divers, like the endangered sperm whale, spend large amounts of time resting at the surface of the ocean, increasing the risk of collision with vessels. Oil can affect survival or the reproductive success of marine mammals through exposure to hydrocarbons and by affecting distribution, abundance, or availability of

Response

Thank you for your comment. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. No drill rigs will be erected as part of this current application and as a result, the impacts mentioned are not anticipated to be a risk during this project. In terms of the seismic surveys proposed, the probability of fish and other animal strikes/ deaths were considered to be very low as per the details of the impacts described in the Draft Scoping Report (DSR) and specialist studies. Furthermore, the disturbances are anticipated to be of local extent, low magnitude and temporary in nature. Activities which require an Exploration Right in terms of the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002 – MPRDA), require that a Scoping and EIA process be undertaken of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended, which is currently being undertaken. The impacts associated with the marine population are being assessed throughout the current Scoping and EIA process. A Strategic Environmental Assessment falls outside the scope of this application.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Desmond Mathew

prey. Increased vessel traffic around platforms may increase collisions with sea turtles. Sea turtles are difficult to sight from moving vessels and often rest on or just below the surface of the ocean. Offshore oil rigs may also attract seabirds at night due to their lighting and flaring and because fish aggregate near them. Bird mortality has been associated with physical collisions with the rigs, as well as incineration by the flare and oil from leaks. This process of flaring involves the burning off of fossil fuels which produces black carbon. Black carbon contributes to climate change as it is a potent warmer both in the atmosphere and when deposited on snow and ice. Drilling activity around oil rigs is suspected of contributing to elevated levels of mercury in Gulf of Mexico fish. A Strategic Environmental Assessment needs to be conducted for this area to assess the marine population that could be affected by this development.

Date 2021/04/29 Method Email

Comment

6. Seismic Survey Impacts Seismic testing is proved to be very negative toward marine life. The Oceana website reports that blasts from seismic air-guns, towed behind ships, are repeated every ten seconds, 24 hours a day, for days and weeks at a time. Sound travels more easily under water than through the air and the noise from a single seismic survey can travel tens of thousands of square kilometers. An article in the Canadian Journal of Zoology reports that seismic surveys increase noise levels to twice the normal level, and impact marine life. Such surveys disturb the communication, navigation and eating habits essential to the survival of marine wildlife. These sonic waves can also damage fish with air bladders, destroy marine wildlife eggs and larvae, and cause fish and other marine species to temporarily migrate away from the affected area. The effect of these blasts of sound on marine life is disturbing and can have catastrophic results: Seals have been found to display dramatic avoidance behaviour, a slower heart rate, ceasing feeding and hauling out of the ocean. Turtles have shown reduced hearing sensitivity at a distance of 1km from the blasts. There has been damage to fish ears at distances of 500m to several kilometres, a reduction of 40 – 80% of catch rates in the North Atlantic and increased embryonic mortality. Zooplankton, which are essential for the health and productivity of global marine ecosystems have suffered significant mortality and the impact has been observed at a range of 1,2km from the blasting sites. Impacts include temporary and permanent hearing loss, abandonment of habitat, disruption of mating and feeding, and even beach strandings and death. For whales and dolphins, which rely on their hearing to find food, communicate, and reproduce, being able to hear is a life or death matter. Whales simply stop “talking” to each other. During the seismic testing phase in KwaZulu-Natal that took place in 2018, there had been an influx of dolphins and whales washing up on the shore. Was there a full EIA done, during the seismic phase?

Response

Thank you for your comment. As referred to above, activities which require an Exploration Right in terms of the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002 – MPRDA), require that a Scoping and EIA process be undertaken of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended, which is currently being undertaken. The impacts of the seismic surveys mentioned were considered by the marine ecologist and assessed as part of the Marine Ecological Assessment. With reference to Table 32 of the DSR it should be noted that for this project specifically, it is anticipated that the impacts on each of the groups of biota are anticipated to be generally of local extent, low magnitude, low probability and temporary in nature.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Desmond Mathew

Date 2021/04/29 Method Email

Comment

7. International Conventions and Treaty Commitments on Climate Change The International Conventions and Treaty Commitments of South Africa must be included as part of the investigation by the appointed consultants. South Africa has signed the Paris Climate Agreement in December 2015, which requires government, business and society to reduce greenhouse gas emissions. According to the Department of Environmental Affairs, “The Agreement is a comprehensive framework which will guide international efforts to limit greenhouse gas emissions and to meet all the associated challenges posed by climate change. It signals the change in pace towards the low carbon development from 2020 onwards through commitments of countries in ambitious national plans called Nationally Determined Contributions.” South Africa’s early-stage commitment in 2009 – to peak emissions during the 2020s and reduce them dramatically during the 2030s – must be adhered to. If oil and gas are drilled, refined, transported and combusted as a result of the offshore discoveries, this would require an even more dramatic decline in other emissions. Yet the Integrated Resource Plan issued in August 2018 calls for a massive increase in fossil fuel, from current levels around 28 000 MW on a typical daily peak, to 46 000 in 2030 as a result of new coal-fired power plants and fracking. Therefore there is no carbon budget allocation in government’s energy mix, much less in transport, urban development, agriculture, waste disposal, wetlands and forest management and other crucial sites of greenhouse gas emissions or sequestration. Under circumstances in which oil companies are confronted with the scenario of ‘unburnable carbon,’ it is apparent that they choose to either completely ignore the worst threat that humanity has ever faced, climate change, or like ExxonMobil, they engage in active denial and scientific sophistry. Failing to consider emissions associated with extraction of fossil fuels or the impact of climate change on a project already adversely affected two major projects in recent years, in Thabametsi and Durban. The Thabametsi 557 MW coal-fired powerplant was proposed by Japan’s Marubeni and South Korea’s KEPCO firms, but like many multinational corporations they refused to consider climate change, and in 2017 the North Gauteng High Court forced them to go back to the drawing board. Once their contributions to climate change became known, in September 2018 they were refused funding by South African banks which now adhere to the OECD recommendations on financing of fossil fuel projects. In an earlier case, in 2012, SDCEA and Durban allies objected to Transnet’s expansion of the Durban port in part because the EIA had not taken seriously the impact of rising sea levels and adaptation costs, much less the additional emissions from expanded shipping. In 2013 Transnet’s EIA was rejected, forcing a long delay in the project as new plans were adopted. What will the Carbon emissions be for the entirety of this project and how is Tosaco Energy going to play a role to ensure that South Africa adheres to its carbon budget.

Response

Thank you for your comment. As pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to accurately assess the risks associated with these activities, given that the specific details of these potential future activities are not known. On the basis of the exploration activities currently proposed it is unlikely that there will be significant climate change impacts. While it is acknowledged that the risks mentioned would need assessment, such assessment falls outside of the scope of the current application and would need to be assessed in detail during relevant subsequent Scoping and EIA processes, should drilling or production be proposed. The environmental consequences applicable to the planned exploration activities have been identified and assessed in the Scoping Report. There is provision in law for future activities (including exploration drilling and production) to be assessed and decided upon, on their merits as and when they are proposed, and prior to commencement of such.

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Desmond Mathew

Date 2021/04/29 Method Email

Comment

8. Demands We as representatives of the community demand that...

Response

Thank you for your comment. Please refer to the comments below.

Date 2021/04/29 Method Email

Comment

9. There be a proper public participation process which includes sufficient advertising.

Response

It should be noted that a public participation process is being undertaken in line with the requirements of the EIA Regulations, 2014, as amended. Please refer to the Public Participation Report for details on the process undertaken.

Date 2021/04/29 Method Email

Comment

10. That all historical contexts of oil and gas drilling including incidents and the historical operations of the company must be looked at.

Response

As pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to accurately assess the risks associated with these activities, given that the specific details of these potential future activities are not known.

Date 2021/04/29 Method Email

Comment

11. The accurate funding information must be made available.

Response

Kindly provide clarity regarding the funding information referred to.

Date 2021/04/29 Method Email

Comment

12. That they indicate upfront how and for whom they will be creating employment opportunities for.

Response

A small amount of skilled employment will be created during the planning and operational phases related to the planning of the survey, and related exploration activities.

Date 2021/04/29 Method Email

Comment

13. They give us with accurate and unaltered information when investigating the impacts of

Response

Please refer to the comments above regarding the assessment of climate change.

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Desmond Mathew

climate change.

Date 2021/04/29 Method Email

Comment

14. They provide an emergency plan and how they are going to implement it if something happens.

Response

The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. Measures for dealing with emergency situations will be included in the Environmental Management Programme (EMPr).

Date 2021/04/29 Method Email

Comment

15. They provide a social impact assessment of all the people "employed by the ocean" including fishing, commercial fishing, mariculture, tourism and recreation, shipping and transportation, whale watching, ports and harbors, ship and boat building, major recreation and sporting events, renewable energy production (wind and wave) and aquarium fishing.

Response

Please refer to the comments above regarding the social impact assessment.

Date 2021/04/29 Method Email

Comment

16. They must provide all the information they have about the coast and the seismic information. They must provide all the information they have about the coast and the seismic information. They must look at impacts, of seismic surveys that have affected marine life, depletion of fish stock, expert knowledge, quota system of fish stock and the advice to produce fish. They must look at marine life that are protected and that are currently in recovery and how this will impact it.

Response

Please note that the information available has been provided in the scoping report and appendices. Please refer to the comments above regarding the impact on the marine ecology.

Date 2021/04/29 Method Email

Comment

17. They investigate the semi static current of the waves, including the freak waves, tide impacts and aggressive waves.

Response

The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill.

Date 2021/04/29 Method Email

Comment

18. The terms of reference of the consultant and any experts that has been appointed.

Response

The terms of reference for the project consultants are included in the Scoping Report and the

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Desmond Mathew

Specialist Reports appended thereto.

Date 2021/04/29 Method Email

Comment

19. All specific targets must be provided including drilling, testing and chemical information

Response

The application for exploration does not include drilling and production activities.

Date 2021/04/29 Method Email

Comment

20. Surveys must be done over a longer period of time

Response

Kindly provide clarity regarding the type of surveys referred to, and the extended time period being referred to?

Date 2021/04/29 Method Email

Comment

21. That they consider the no go option as an alternative

Response

The No-Go Alternative will be considered further in the EIA Phase of the project.

Date 2021/04/29 Method Email

Comment

22. All the demands stated above need to be in the EIA process. There should be no flexibility and variance in this process. The consulting company cannot be providing expert opinions because their opinion will be biased. Desktop studies will not be acceptable as this can be construed as misinformation.

Response

Your comment is noted. Please note that the Scoping and EIA process is being undertaken in line with the requirements of the EIA Regulations, 2014, as amended, by EIMS, an independent environmental consulting company, as well as an independent specialist team.

Date 2021/04/29 Method Email

Comment

23. Conclusion The Gulf of Mexico oil spill can be made an example of how important it is to have a disaster emergency plan and of how offshore oil and gas drilling causes detrimental effects to the ecosystem. We are under the impression that all tiers of Government are promoting the idea of allowing these activities to go ahead without proper and meaningful consultation with the public communities. This type of reaction from Government is contradictory because whilst they are promoting tourism with the main focus on the Sardine shoals, whales and dolphin sighting points, beautiful marine nurseries, various bird life and small B&Bs which thrive on our beautiful beaches and ocean, they are destroying or allowing the

Response

Thank you for your comment. The application for exploration does not include drilling and production activities. EIMS is unable to comment on the reaction of government regarding this type of development. Your objection has been noted and will be included in our Public Participation Report and submitted Final Scoping Report to the competent authority.

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Desmond Mathew

destruction of this beautiful ocean we have. It seems that the offshore oil and gas project will only benefit the elite and rich people of society whereby once again the poor gets dealt a raw deal. Therefore we object completely to these activities and the way it has been presented to the people and urge the Department of Minerals and Energy not to authorize this development.

Date 2021/10/04 **Method** Email

Comment

1. Introduction The South Durban Community Environmental Alliance (“SDCEA”) is a non-governmental organisation representing 17 community and environmental organisations concerned with environmental justice and sustainable development in South Durban and KwaZulu-Natal. SDCEA represents vulnerable and disadvantaged persons whose lives and livelihoods depend on the protection of the coastal ecosystems of KwaZulu-Natal, in the vicinity of Durban. Its members include the following institutions: a. BioWatch b. City of Love Ministries c. Poor Flat Dwellers Association d. Airport Farmers Association e. Merebank Ratepayers Association f. Silverglen Civics g. Anti-Pollution Watchdogs h. KZN Subsistence Fisherfolk Forum i. Christ the King Church j. Earthlife Africa k. Athlone Park Residence Association l. Merebank Civic Committee m. Bluff Ridge Conservancy n. Urban Futures Centre o. Chatsworth Civics p. Active Citizens Movement q. Ubunye Bamahostela r. Wentworth Development Forum s. Clairwood Social Forum t. Clairwood Ratepayers Association u. Treasure Beach Environmental The SDCEA has for the last two decades participated in forums for the improvement of environmental management in KZN and in particular, in the industrial areas south of Durban. SDCEA has considered the EIA dated March 2020, and submits the comments that follow, for your consideration.

Date 2021/10/04 **Method** Email

Comment

2. Impacts of Seismic Activity Seismic testing is still taking place and proved to be very negative toward marine life. 1 The Oceana website reports that blasts from seismic air-guns, towed behind ships, are repeated every ten seconds, 24 hours a day, for days and weeks at a time. Sound travels more easily under water than through the air and the noise from a single seismic survey can travel tens of thousands of square kilometres. 2An article in the Canadian Journal of Zoology reports that seismic surveys increase noise levels to twice the normal level, and impact marine life. Such surveys disturb the communication, navigation and eating habits essential to the survival of marine wildlife. These sonic waves can also damage fish with air bladders, destroy marine wildlife eggs and larvae, and cause fish and other marine species to temporarily migrate away from the affected area. The effect of these blasts of sound on marine life is

Response

Comment noted. The SDCEA was previously registered as an I&AP for this application. The SDCEA refers to the consideration of an EIA report dated March 2020. The EIA report submitted for public review for this Tosaco application was dated June 2021.

Response

Thank you for your comment. The impacts of the seismic surveys mentioned were considered by the marine ecologist and assessed as part of the Marine Ecological Assessment. With reference to Section 9.3 of the EIA Report it should be noted that for this project specifically, it is anticipated that the impacts on each of the groups of biota are anticipated to be generally of local extent, low magnitude, low probability and temporary in nature.

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disturbing and can have catastrophic results: Seals have been found to display dramatic avoidance behaviour, a slower heart rate, ceasing feeding and hauling out of the ocean. Turtles have shown reduced hearing sensitivity at a distance of 1km from the blasts. There has been damage to fish ears at distances of 500m to several kilometres, a reduction of 40 – 80% of catch rates in the North Atlantic and increased embryonic mortality. Zooplankton, which are essential for the health and productivity of global marine ecosystems have suffered significant mortality and the impact has been observed at a range of 1,2km from the blasting sites. Impacts include temporary and permanent hearing loss, abandonment of habitat, disruption of mating and feeding, and even beach strandings and death. For whales and dolphins, which rely on their hearing to find food, communicate, and reproduce, being able to hear is a life or death matter. Whales simply stop “talking” to each other.

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Comment

3. Exploration drilling impacts The EIA states that “the current exploration programme does not include any provision for exploration drilling; however discovery of hydrocarbons will lead to exploration drilling”. therefore it’s still important to recognize the impacts of exploration drilling to understand the dangers of oil and gas exploration.

Response

Thank you for your comment. EIMS would like to reiterate that it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the impacts of such activities given that the specific details of these potential future activities are not known. It should further be noted that the life cycle of the current project is limited to the exploration activities as stated in the various reports and this has been the focus of the Scoping and EIA Process. It is in our view premature to assess the likely impacts of further invasive exploration activities or production activities as the extent, duration, location, and magnitude applicable to these activities are unknown at this stage. There is provision in law for these activities to be assessed on their merits as and when they are proposed.

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Comment

4. Impact on the communities, people and environment When oil spills occur they can bring catastrophic harm to marine life and devastating losses for local businesses. Even routine exploration and drilling activities bring harm to many marine species. Expanded offshore drilling poses the risk of oil spills ruining our beaches, bringing harm to those who live, work and vacation along the coasts, as well as harming habitats critical to plants and animal species. Oil spills can quickly traverse vast distances. Exploration of oil and gas presents multiple forms of environmental degradation. Oil pollution also damages fishing equipment and pollutes drinking water in wells. Oil spills and waste dumping have also seriously damaged agricultural land. Long term effects include damage to soil fertility and agricultural productivity, which in some cases

Response

Thank you for your comment. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. The EIA report has been prepared in accordance with the NEMA EIA Regulations and assesses the impacts of the specific exploration activities being proposed. Section 9 of the Scoping Report presents the impacts identified, which includes small scale spills associated with the proposed seismic exploration activities.

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can last for decades. Economically, the costs of those products become exorbitant given the law of supply and demand. The negative impact of environmental consequences of the oil industry activities are mainly localized within the host communities. However, some of the effects have trans-boundary implications. Gas flaring is a contributing factor to global warming and these are risks no community is willing to take.

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Comment

5. Impact on fisherfolk These developments and projects will not only cause catastrophic destruction with the above-mentioned impacts but will also destroy livelihoods to over 50 000 subsistence fisher folk who eke out a living daily. There will be no fish for the subsistence fishermen, who fish areas all along the coast. This impact will increase poverty and lead to more people joining unemployment line. Thereby increasing to the millions of people who are unemployed and this development will require specific skills which the majority of the population do not possess therefore there is no job creation in these projects. In the public participation process, this group of marginalised fisherfolk must be given notice and opportunity to comment and voice their concerns.

Response

Thank you for your comment. Section 9 of the EIA Report presents the impacts identified. The potential impact on marine fauna and the local fisheries has been included. In terms of the seismic surveys proposed, the probability of fish and other animal deaths were considered to be very low as per the details of the impacts described in the Draft Scoping Report and specialist studies. Furthermore, the disturbances are anticipated to be of local extent, low magnitude and temporary in nature. The impact on the fishing communities was also assessed. For most fisheries sectors, the effects of acoustic disturbance on catch rates would be considered to be of overall negligible significance. However, in the case of the Tuna Pole Fishery, Netfish, Demersal Longline and Fisheries Research sectors, the spread of sound into fishing grounds may affect catch rates and therefore the overall significance of the survey impact on these sectors has been assessed to be low. Furthermore, it should be noted that owing to the requests from the fishing communities, EIMS applied for an extension of the EIA timeframe in order to specifically meet with these communities and fishing co-operatives. These meetings were held in Port Nolloth, Kleinzee and Hondeklip Bay and served to present the findings directly to the fishing communities and co-operatives and also to gather information on where these communities undertook their fishing activities, with the view of augmenting the information in the EIA Report. These meetings were attended by the fisheries specialist that compiled the fisheries mapping and report.

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Comment

6. Impacts of Drilling Discharges from drilling consist mainly of crushed material from the borehole (cuttings) and chemicals used during the operation. In addition brought to the surface is "produced water" that will contain trace elements of oil assuming oily condensate is discovered. This requires evaluation. With regard to the drill cuttings it is not known what alternatives are proposed or whether the cheapest option of discharge into the nearby ocean is the only option being considered. For example is it not possible to injecting everything back into suitable geological formations or take it to shore for further treatment. More drilling muds and fluids are discharged into the ocean during exploratory drilling than in developmental drilling

Response

Thank you for your comment. EIMS would like to reiterate that it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the impacts of such activities given that the specific details of these potential future activities are not known. It should further be noted that the life cycle of the current project is limited to the exploration activities as stated in the various reports and this has been the focus of the Scoping and EIA Process. It is in our view premature to assess the likely impacts of further invasive exploration activities or production activities as the extent, duration, location, and magnitude applicable to these activities are unknown at this stage. There

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because exploratory wells are generally deeper consequently this is a very real threat to the environment. Literature on the discharge of drill cuttings and associated drilling fluids indicate that it will cause the death of the benthic (bottom-living) organisms living in and on sediments covered by cuttings in the immediate vicinity of the discharge point. We therefore would demand that a full survey of such benthic biota is established prior to the drilling process and that this be monitored as to its state of health. It is also known that offshore rigs can dump tons of drilling fluid, metal cuttings, including toxic metals, such as lead chromium and mercury, as well as carcinogens, such as benzene, into the ocean all of which must be assessed. The prospect of a catastrophic spills and blowouts is a documented threat from offshore drilling operations and the near impossibility of introducing a successful capping of the blowout at the depths cited are of deep concern to us. We require significant detail to be presented on this aspect given the learnings of Deep Water Horizon disaster.

is provision in law for these activities to be assessed on their merits as and when they are proposed.

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Comment

7. Social enhancement studies We need independent research done on the impacts of this project in regard to people's livelihoods, quality of life and a cost base analysis done on the health the residents will endure from the chemicals emanating from the development. The West Coast of South Africa is a hugely popular place and tourist destination because of the extensive beautiful beaches. Healthy oceans are critically important to marine life and to coastal communities whose economies rely on tourism and fishing. It must include the loss of crops, food security, employment, and local businesses and how this will impact on them-agriculture-markets. Fishers have been in the struggle for fishing rights for many years and they are constantly being harassed, marginalized and restricted in many areas from fishing. The constant increase of vessels in out of the harbor will have significant impacts and chase fish away from that vicinity: ultimately infringing on the poor fishermen rights to a livelihood. If oil and gas is actually found in the proposed site it will attract heavy guarded and military presence. This is another means and way to lock out fisher folk from your site and stops them from accessing the deep water fish.

Response

Thank you for your comment. As noted previously, the application for exploration does not include drilling and production activities or any other activities which are likely to result in catastrophic chemical spills. EIMS would like to reiterate that it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the impacts of such activities given that the specific details of these potential future activities are not known. Section 9 of the scoping report presents the impacts identified. The potential impact on marine fauna and the local fisheries has been included. In terms of the seismic surveys proposed, the probability of fish and other animal deaths were considered to be very low as per the details of the impacts described in the Draft Scoping Report and specialist studies. Furthermore, the disturbances are anticipated to be of local extent, low magnitude and temporary in nature. The impact on the fishing communities was also assessed. For most fisheries sectors, the effects of acoustic disturbance on catch rates would be considered to be of overall negligible significance. However, in the case of the Tuna Pole Fishery, Netfish, Demersal Longline and Fisheries Research sectors, the spread of sound into fishing grounds may affect catch rates and therefore the overall significance of the survey impact on these sectors has been assessed to be low. The public participation process has included notification and consultation with the fisheries industries. Given the above, the impact on fisheries is deemed to be of low significance, the need for a social impact assessment is not considered to be required at this stage.

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Desmond Mathew

Comment

8. Impacts of Oil and Gas Drilling on Marine life Exploratory drilling may impact marine mammals based on disturbance by sound emitted during drilling, during seismic profiling of the well, and from support vessels or aircraft. Drilling can also result in oil spills, which can affect marine mammals directly by contact, inhalation, or ingestion, or indirectly by affecting marine mammal prey or habitat. Sea birds are attracted to offshore drilling platforms by lights, burning flares and human food that can be scavenged. Birds are killed or injured after colliding with the structures, becoming contaminated with oil and related chemicals, and even being burned by flares. Birds' feathers can get coated with oil, preventing them from being able to keep warm and reducing their ability to float. Roughly 200,000 migratory birds are killed each year near offshore drilling rigs in the Gulf of Mexico. They often fly circles around platforms for hours at a time, exhausting themselves or colliding with platforms or other birds. Deep-divers, like the endangered sperm whale, spend large amounts of time resting at the surface of the ocean, increasing the risk of collision with vessels. Oil can affect survival or the reproductive success of marine mammals through exposure to hydrocarbons and by affecting distribution, abundance, or availability of prey. Increased vessel traffic around platforms may increase collisions with sea turtles. Sea turtles are difficult to sight from moving vessels and often rest on or just below the surface of the ocean.

Response

Thank you for your comment. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill. No drill rigs will be erected as part of this current application and as a result, the impacts mentioned are not anticipated to be a risk during this project. In terms of the seismic surveys proposed, the probability of fish and other animal strikes/ deaths were considered to be very low as per the details of the impacts described in the EIA Report and specialist studies. Furthermore, the disturbances are anticipated to be of local extent, low magnitude and temporary in nature. Activities which require an Exploration Right in terms of the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002 – MPRDA), require that a Scoping and EIA process be undertaken of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended, which is currently being undertaken. The impacts associated with the marine population have been assessed throughout the current Scoping and EIA process.

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Comment

9. Physical Effects of Offshore Oil Rigs Any floating platform will attract pelagic fish and seabirds as well as certain marine mammal species. A consequence of this for seabirds is that bird mortality has been associated with physical collisions with the rigs especially at night, as well as incineration by the flare. Birds settling on the water surrounding the rig may come in contact with oil residues and leaks leading to their death following contact with such pollutants. Fish aggregating around the drilling rig may be exposed to high levels of pollutants which are then biomagnified up the food chain ending up in apex predators such as sharks and marine mammals such as dolphins and toothed whales. It has long been suspected that drilling activity around oil rigs in the Gulf of Mexico is associated with elevated levels of mercury in fish.

Response

Thank you for your comment. The application for exploration does not include drilling and production activities. No offshore oil rigs will be erected as part of this current application and as a result, the impacts mentioned are not anticipated to be a risk during this project.

Date 2021/10/04 Method Email

Comment

10. Emergency Plan Companies are required by law to have comprehensive emergency response plans and procedures in place before any offshore activity can take place. Emergency

Response

Thank you for your comment. The application for exploration does not include drilling and production activities or any other activities which are likely to result in a catastrophic oil spill.

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Desmond Mathew

response plans are designed to first protect people and the environment therefore it is imperative that a thorough emergency plan be brought forward with regards to the oil and gas exploration. The emergency plan must cover fatalities, serious injuries and medical emergencies, oil or hazardous material spills, fires and explosions, vessel collisions, extreme weather, including icing, presence of heavy sea ice or icebergs, missing persons, diving emergencies, loss of control of a well, damage to offshore infrastructure, support vessels and aircraft and helicopter incidents. Emergency response plans must be revised regularly as technology advances and new research becomes available. The oil spill contingency plan is very inadequate as mentioned above.

Measures for dealing with emergency situations have been included in the Environmental Management Programme (EMPr).

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Comment

11. Impact on South Africa's natural capital accounts South Africa's late Environment Minister Edna Molewa signed the 2012 Gaborone Declaration, which was developed by ten African countries so as "To ensure that the contributions of natural capital to sustainable economic growth, maintenance and improvement of social capital and human well-being are quantified and integrated into development and business practice." This commitment – supported by Conservation International and the World Bank – entails having not only the South African state but business recalculate major projects, such as oil and gas exploration and drilling. Specifically, any EIA accounting of impacts on the environment should entail "incorporating the value of natural capital in public and private policies and decision-making," as the Gaborone Declaration makes clear: <http://www.gaboronedeclaration.com/nca/>

Response

Thank you for your comment. It is understood that this initiative has a number of commitments and that the first of the GDSA's three commitments encourages member countries to take action towards, "incorporating the value of natural capital in public and private policies and decision-making."

Date 2021/10/04 **Method** Email

Comment

12. International Conventions and Treaty Commitments on Climate Change The International Conventions and Treaty Commitments of South Africa must be included as part of the investigation by the appointed consultants. South Africa has signed the Paris Climate Agreement in December 2015, which requires government, business and society to reduce greenhouse gas emissions. According to the Department of Environmental Affairs, "The Agreement is a comprehensive framework which will guide international efforts to limit greenhouse gas emissions and to meet all the associated challenges posed by climate change. It signals the change in pace towards the low carbon development from 2020 onwards through commitments of countries in ambitious national plans called Nationally Determined Contributions." Its 2021 and South Africa is nowhere close to reducing its carbon emissions. In fact, investing in more fossil fuels like oil and gas will digress from South Africa's climate change

Response

Thank you for your comment. As pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to accurately assess the risks associated with these activities, given that the specific details of these potential future activities are not known. On the basis of the exploration activities currently proposed it is unlikely that there will be significant climate change impacts. While it is acknowledged that the risks mentioned would need assessment, such assessment falls outside of the scope of the current application and would need to be assessed in detail during relevant subsequent Scoping and EIA processes, should drilling or production be proposed. The environmental consequences applicable to the planned exploration activities have been identified and assessed in the Scoping Report. There is provision in law for future activities (including exploration drilling and production) to be assessed and decided upon, on their merits as and when

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Desmond Mathew

ambitions. Its important to take note of future generations and how they are going to be affected by fossil fuel investments. In the 2021 International Panel Climate Change report, it states that unless there are drastic reductions to greenhouse gas emissions this decade, the catastrophe will be inevitable and irreversible.

they are proposed, and prior to commencement of such.

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Comment

13. Public participation The public participation process for this EIA process was inadequate. The consultants did the bare minimum in terms of advertising. There was no mention of pamphlet distribution or radio advertisements. Also only a few locations were mentioned in terms of placing notice boards. The tourism industry, recreational industry, boat fishing and subsistence fishers, communities who use the ocean for spiritual significance and the general public were not informed of this development. There were many known organizations and communities in the area of interest that were not identified. This alone shows that the consultants and developers are inconsiderate of the need to involve as many communities as possible; they just want to tick the box to move the process along which is unacceptable. According to Department of Environmental Affairs (2017), All potential and I&APs have a right to be informed early and in an informative and proactive way regarding proposals that may affect their lives or livelihoods. Early communication can aim to build trust among participants, allow more time for opportunities to modify the proposal in regard to the comments and information gathered during the Public Participation Process. public participation, and improve community analysis and increases.

Response

Thank you for your comment. It should be noted that at the beginning of the project an initial call to register phase was undertaken by the EAP, and that this involved putting up site notices in the local towns and distributing notices to properties adjacent to the application area. On these notices, the public was asked to register as I&APs for the EIA project. The EAP undertook to register the people who requested and recorded their concerns and comments during the Scoping Phase and attended the first public open days held during April 2021. Thereafter, the EAP has engaged with the registered I&APs. EIMS would still accept any further registration and comments for new I&APs. However, the requirements set out in the National Environmental Management Act (Act 107 of 1998 – NEMA) and the EIA Regulations, 2014 as amended, have been followed during the process. EIMS would like to point out that EIMS undertook several physical public open days in the towns along the coast with the intention to physically engage the local communities and present the findings of the EIA to them. Meetings were undertaken in Alexander Bay, Port Nolloth and Hondeklip Bay during April 2021, and in Alexander Bay, Port Nolloth, Kleinzee and Hondeklip Bay during August 2021 in in order to include I&APs from those areas. During each of the meetings the information was communicated in Afrikaans, and explained in a non-technical manner whenever required. Following the meetings August 2021, a summary of the EIA was provided in Afrikaans and English to all registered interested and affected parties. Additionally, a virtual meeting was held on 27 August 2021 in response to certain stakeholders' requests who could not attend the physical open days and as such the meeting was meant to include a larger audience and to augment the physical meetings. Furthermore, it should be noted that owing to the requests from the fishing communities, EIMS applied for an extension of the EIA timeframe in order to specifically meet with these communities and fishing co-operatives. These meetings were held in Port Nolloth, Kleinzee and Hondeklip Bay and served to present the findings directly to the fishing communities and co-operatives and also to gather information on where these communities undertook their fishing activities, with the view of augmenting the information in the EIA Report. These meetings were attended by the fisheries specialist that compiled the fisheries mapping and report. Considering the above, EIMS is of the opinion that the stakeholders have had sufficient opportunity to obtain the required information and to submit their comments in this regard.

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Peter Foley

Date 2021/09/29 Method Email

Comment

Ms Sinalo Matshona We are unable to open your attached report on your website.

Response

Dear Mr Foley, Thank you for your correspondence and taking my call. Please find attached the notification letter that was sent out regarding the EIAR availability. In addition to this kindly note that we have double checked on our side and we can access the all the files, please may you try opening the report on the website again and let me know if you still can not access the attached files. Should you have any further queries, please feel free to EIMS know.

John Gibson

Date 2021/02/21 Method Email

Comment

Hi, If your not aware they slapped a Marine Protected Area amongst your proposed survey area. See Gazette No 42478 ,pages 52-55 Its classed as sanctuary.

Response

Dear Mr Gibson, I trust this email finds you well? Thank you for your correspondence regarding the proposed project. The Marine Protected Area has been identified by one of the specialists for the project and will be included in our Environmental Impact Assessment. Please can you confirm if you would like to be registered on the project I&AP database? As a registered I&AP you will be provided with the opportunity to comment on the Scoping and EIA reports once they are made available. Should you require any further information or have any further comments please feel free to contact EIMS.

Johann Augustym

Date 2021/03/16 Method Email

Comment

As I responded previously, we were not able to open the registration form. Please ensure that we are listed as an IAP, since we have a direct interest in this area. Regards

Response

Dear Johann, Thank you for your follow up email. As per our conversation yesterday, kindly note that you have been registered on the project I&AP database. I have attached a word version of the questionnaire for your reference. As mentioned, the questionnaire contains questions relating to the receiving environmental and provides an opportunity for I&APs to provide any additional information to the project team that they feel is relevant. Should you not wish to complete the questionnaire, you are more than welcome to respond in email format, should you wish to provide additional information. Should you require any further assistance or have any further comments please feel free to contact EIMS.

Date 2021/03/24 Method Email

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Johann Augustym

Comment

I am having problems opening the registration form pdf file. It seems to be corrupted. Please check and resend. Regards

Response

Thank you for your correspondence. Please can you confirm if you have received the new file from this morning.

Date 2021/03/24 Method Email

Comment

Dear Cheyenne Thank you very much. I have filled out the IAP form and it is attached. I will submit further information once I receive feedback from our members. Best regards

Response

Dear Johann, Thank you for the feedback. I will pass the information onto the project team for their consideration. Further please note that you will be provided with an opportunity to review and comment on the Scoping and EIA reports and associated appendices once they become available. Should you have any further comments or queries please do not hesitate to contact EIMS.

Mr George Cloete

Date 2021/08/11 Method Telephone

Comment

EIMS contacted Mr Cloete and informed him of the proposed project and EIA Phase public open days. He confirmed that he would like to be registered as an I&AP.

Response

Mr Cloete was Registered as an I&AP and confirmed that he would get the relevant information regarding the public open days from Mr Andy Pienaar.

Clr Paulus Van Reenen

Date 2021/08/11 Method Email

Comment

EIMS contacted Mr Van Reenen to inform him of the project and to invite him to the public meetings scheduled during the EIA Phase.

Response

EIMS sent Mr Van Reenen an email to confirm his registration and provided notification of the EIA Report and Public Open day.

Esme Hough

Date 2021/02/18 Method Email

Comment

"Hi there I would appreciate receiving a registration form. After reading the document, I have one question: will the exploration of offshore oil and gas only be offshore and not on land?" A follow up email was sent on the 23/03/2021: "Good day I would appreciate it if you could

Response

Good Day Esme, I trust this email finds you well? Kindly find attached as request a copy of the EIMS registration form. Further to the above, kindly note that all exploration will be offshore in the area Marked as Blocked 1 (outlined in red) as per the attached locality map. Should you have

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Esme Hough

confirm receipt of my email."

any further comments and queries please feel free to contact EIMS.

Ms Nokuthula Khumalo

Date 2021/09/29 Method Email

Comment

Dear Sir/Madam, Kindly stop sending EIA related SMS to Ms P Derby at 0825765262. The correct contact person is Ms Mapaseka Lukhele at 0605729811. She is the General manager for Sustainability.

Response

Dear Ms Nokuthula, My apologies for the delayed response to your below email. Thank you for sharing this contact information change with us. Kindly note that Ms P Derby was removed from the I&AP Database for the Tosaco Exploration Right EIA Project and as such she will not be receiving any future correspondence regarding the above-mentioned Project. Also note that we have now registered Ms Lukhele on the projects I&AP Database as requested below and in that regard all future EIA Process related correspondence will be sent to her through the SMS channel as advised below. Please let me know if this is in order.

Claire Johnston

Date 2021/03/24 Method Email

Comment

Please would you register me as an I&AP for the application to explore for oil and gas offshore of N. Cape.

Response

Dear Claire, Thank you for your correspondence with regards to the above mentioned project. Kindly note that you have been registered as an I&AP on the project database. As a registered I&AP you will be provided with the opportunity to comment on the Scoping and EIA Reports once they become available. Should you have any comments or queries please feel free to contact EIMS.

Leilani Swartbooi

Date 2021/03/24 Method Email

Comment

Herewith attached registration form: Interest: Alexkor holds mining rights in the area of interest. Communities/ tribal authorities/ organisations within the application area: Richtersveld CPA. Description of receiving environment: RAMSAR Area, Proposed Protect Area, Wetland, Mining and Agriculture. Proposed land developments: Proposed Boezoe Bay deep sea harbour and the Office of the Presidency. Cultural Features: Heritage Sites in the mining area: Graves and Fossils. Bio-physical / Socio-economic Impacts: Impact on Socio-economic development within the Richtersveld Community. Concerns: Impact on mining activities.

Response

Dear Leilani, Thank you for your correspondence. Kindly note that your registration has been received. As a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA reports once they are made available. Should you have any further comments or queries please feel free to contact EIMS using the contact details below.

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Leilani Swartbooi

General: How will this project coincide with the current mining activities and the proposed Bozoe Bay Harbour Project.

Date 2021/10/24 Method Email

Comment

Dear Ms Sinalo Matshona, I herewith acknowledge the invitation.

Response

Response to the Virtual Meeting Notification was noted.

Christina Hagen

Date 2021/08/27 Method Email

Comment

Dear Sinalo I wasn't able to attend the meeting today. Will a recording be made available?

Response

Dear Christina, My sincere apologies for the delay in responding to your correspondence. Kindly note that the discussions undertaken during the Virtual Meeting on the 27th August 2021 for the Tosaco Exploration Right EIA were captured in writing in a form of minutes. May you please see attached the minutes of the meeting and the presentation for your reference. Should you have any queries or comments in this regard, please feel free to let EIMS know.

Date 2021/10/04 Method Email

Comment

Dear Sinalo Please find attached comments from BirdLife South Africa on the above project. And thank you for the meeting minutes you sent earlier.

Response

Dear Christina, Thank you for your correspondence and comments. Please note that this is an acknowledgement of receipt of your comments on the DEIAR. A formal response to the comments will be issued to you in due time.

Quinton

Date 2021/02/21 Method Email

Comment

I trust that you're good and healthy. I would like to request the registration form to complete as per your EMIS document. I'm looking forward to hearing from you soon. Follow up email was sent as informing EIMS that the attachment was missing.

Response

Good Day Quinton, Thank you for your correspondence. My apologies. Kindly find attached. Kindly note that your correspondence dated the 27th February 2021 is considered as registration for the project however, should you have any additional information to provide or any comments please feel free to contact me.

Solomon Lephoto

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Solomon Lephoto

Date 2021/03/24 Method Email

Comment

Please find attached my completed IAP form. Can you please forward the fully completed application form lodged and supporting documents for the ER application? The Bid information does not disclose all the information with regards to the application.

Response

Thank you for your correspondence. Kindly note that your request has been submitted to the application for their attention. Feedback relating your request for the EA application documentation will be provided as soon as possible. EIMS would like to thank you for your patience in this regard. Furthermore please note that the Scoping Report and associated appendices will be made available in due course. Should you have any further comments or queries please feel free to contact EIMS.

Mr Chris Kimber

Date 2021/09/29 Method Email

Comment

Good afternoon Mr Matshona, Herewith attached the signed form for your attention.

Response

Dear Marina, Thank you for your correspondence. Kindly note that your attached I&AP Registration form on behalf of Mr Chris Kimber has been received and noted. Mr Kimber has been registered as an I&AP on the projects database and will be provided with the opportunities to participate in the Environmental Authorisation Process as they become available. Should you have any queries or comments, please feel free to contact EIMS.

Mr Quiryn Sneathlaga

Date 2021/04/06 Method Email

Comment

I wish to inform you that you have NOT included Kleinzee in your public participation. There are a few people that might have a lot of input. Please respond if you can make it, if not I would like to have some input as I have concerns that I would like addressed.

Response

Thank you for your correspondence. Please note that Kleinzee was included in the public participation process during the initial call to register phase of the project by placing and handing out of site notices and background information documents. EIMS values the comments provided by the public during the public participation process. As such, please submit your comments within the comment period even if you are unable to attend the open days. A copy of the information will also be made available on the EIMS website. Alternatively, if you would like to request a virtual meeting with the Team, we will be happy to arrange one. Please feel free to contact EIMS should you have any further comments or queries.

Jackie Sundae

Date 2021/03/24 Method Email

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Jackie Sundae

Comment

Dear Ms Muthukarapan RE: Request for registration as interested and affected parties in the EIA process for the Tosaco Energy Pty Ltd application for environmental authorization for off shore gas of Hondeklipbaa, Northern Cape. I am a researcher at the University of Cape Town, Department of Environmental and Geographical Sciences, One Ocean Hub research project. I am currently working with the Hondeklipbaai community conducting research into the impact of the blue economy on their livelihoods. Please will you kindly register me as an interested and affected party. I trust that you will be alerting the community to the need for them to register and will make it possible for them to register. Many of the community members do not have access to the internet.

Date 2021/04/29 Method Email

Comment

Dear EIMS My email last night bounced back at me - please see below. Kindly accept this submission as you will see it was sent before midnight on 29th April 2021 Comments received: "Date 29 April 2021 For attention: Ms Cheyenne Muthukarapan Environmental Impact Management Services (EIMS) Per email: tosacoer@eims.co.za Dear Ms Muthukarapan, RE: SUBMISSION ON SCOPING REPORT: PROPOSED TOSACO ENERGY BLOCK 1 EXPLORATION RIGHT TOSACO ENERGY (PTY) LTD, PASA REFERENCE: 12/3/362 Thank you for the opportunity to comment on the Scoping Report for TOSACO ENERGY PTY LTD. PASA REF: 12/3/362 Please find my comments on the Scoping Report for the above-mentioned proposed exploration right in Block 1 attached. I trust that this is in order. Yours sincerely Dr Jackie Sunde Researcher One Ocean Hub Research Team, Dept of Environmental and Geographical Science, University of Cape Town Comments on the Scoping Report: PROPOSED TOSACO ENERGY BLOCK 1 EXPLORATION RIGHT TOSACO ENERGY (PTY) LTD, PASA REFERENCE: 12/3/362 This application is located within Block 1 in the Exclusive Economic Zone located along the Northern Cape Coast. Block 1 is located offshore between Alexander Bay, extending south along the western coastline, including Port Nolloth, to approximately Hondeklip Bay and approximately 250 km offshore of the coast of the Northern Cape. It therefore also includes the two key traditional fishing communities of Port Nolloth and Hondeklipbaai who rely on the health of the ocean for their livelihoods. In addition, it lies adjacent to the culturally and historically important Namakwa District, home of the Khoi-San indigenous communities of the Richtersveld. Some of the indigenous communities who have lived along this coastline, including the Toppenaar of Namibia, for whom the sea is sacred, need to be adequately consulted as this project has potential risks for the well-being of the ocean eco-systems that play a key role in their livelihoods and cultural well-being. 1. General Concerns: 1.1 Need for a Strategic Environmental

Response

Dear Jackie, Thank you for your correspondence. Kindly note that the community was informed of the project during the call to register phase of the project conducted in February 2021. Site Notices were placed within the community, posters were placed where possible at local shops and handouts delivered to community members as far as possible. Adverts were also placed in the local newspapers with adequate distribution in the affected communities. As a registered I&AP, you will be provided with the opportunity to comment on the Scoping and EIA reports once they become available. Should you have any further comments or queries please feel free to contact EIMS.

Response

Thank you for your comments. Kindly consider them acknowledgement of comments received. Please note that a formal response will be provided in due course.

Jackie Sundae

Assessment (SEA) for this region. Block 1 lies adjacent to a coastline that has been mined extensively for the past century. The destruction of this coastline and damage to marine and coastal life as well as cultural heritage is enormous. Whilst each prospecting or mining application is only considered with respect to the individual merits of each application, the cumulative impacts of all the various mining and extractive activities in this region requires a strategic environmental assessment (SEA). The public has the right to be aware of the cumulative impacts of the range of extractive activities in the region and to decide if this is desirable or needed in terms of the country's overall social, ecological and economic well-being.

1.2 Omissions from the report that need to be addressed during the EIA phase The Scoping Report regrettably fails to include reference to a number of critical policy and planning documents of relevance to this application. This is of specific relevance to the question of the impact of the proposed activities on atmospheric emissions and climate change profile of this already climate stressed region. In addition, it fails to consider existing literature that provides evidence of the great importance of this coastline to the country's cultural heritage and the customary rights of the local indigenous Khoi-San communities. These issues need specialist assessments and should be elaborated during the EIA phase.

1.2.1 Cultural Heritage There has been extensive scholarship exploring the palaeontology, geology, historical biology and archaeology of this coastal region around Hondeklipbaai (Pether 1986, 1994, Hart 2017, Govender 2019), due to its rich geological deposits and the evidence it provides of early life. The geology of this area is complex, involving the interaction of three different systems namely fluvial, marine and aeolian systems. Both the marine and the coastal systems are extremely rich in resources. The Benguela current upwelling has historically left a very nutrient-rich footprint on this coastline in the form of onshore deposits rich in palaeontology and archaeology (Pether et al. 2000 in Govender 2019:1). The region in and around Hondeklipbaai contains a wide variety of significant heritage resources ranging from palaeontology and historical biological data, Middle and Late Stone Age shell middens to maritime archaeology (Hart 2016). Both the animal and human heritage is significant. For example, a rich Cenozoic palaeontological heritage exists from a few onshore deposits along South Africa's west coast that span the Mio-Pliocene and significant early Pliocene cetacean marine fauna, that is, early aquatic mammals such as whales, dolphins and seals, have been found here (Govender 2019). Govender describes Hondeklip Bay as a Zanclean, early Pliocene, locality. Cetacean fauna from Hondeklip Bay includes the mysticetes: *Balaenopteridae* indet. (sp. 1), cf. *Eschrichtius* sp., *Balaenopteridae* indet., cf. *Plesiobalaenoptera*, *Balaenidae* indet., and the odontocetes: *Physeteroidea* indet, cf. *Livyatan*, and an unidentified neonate delphinid. Hondeklip shares a seal and cetacean taxon with Langebaanweg, which is 430 km to the south. Cf. *Eschrichtius* sp. from Hondeklip Bay is the first description of the taxon from South Africa and it also has the first balaenid described from South Africa. Its cetacean fauna also strengthens the links of South Africa's west coast with the Atlantic of Europe and North America, and eastern North and South Pacific (Govender 2019:1).

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A wide range of palaeontology fossil resources has been found in the Hondeklipbaai area (Pether 2008). Some of the most notable of these include marine molluscan fauna of Namaqualand coastal deposits (Kensley & Pether, 1986), the first extinct Tertiary barnacle recorded from South Africa was described from Hondeklip by Pether (1990) and Brunton & Hiller (1990) have described the fossil brachiopods collected by Hart in the Hondeklip study area. Pether (1994b) provided detail on the exposures and palaeontology at Hondeklipbaai that have contributed to the presence of extensive diamonds along the coastline (Pether, 2008 in Hart 2016). Hart notes that numerous artefacts found in caves attest to the use of the Namaqualand coast during the late Pleistocene (Hart 2016:18). Sites dating back to the Middle Stone Age that have been found often include shellfish fossils, and hence it is hypothesized that there was occupation of this shoreline during the interglacial periods. He observes that the archaeological sites just north of Hondeklipbaai in the Koingnaas area are rich in both bone artefacts as well as local fauna and that within the many stone age middens in this area, signs of ritual activity such as the burying of tortoise carapaces and carapace bowls have been identified (Orton, J. Hart, T. and Halkett, D. 2005). Hart (2016) noted that the use of whale bones (particularly ribs) by the early 'Strandlopers' in the construction of their huts has been well documented. Hart (2016) warned that there are shipwrecks in the surf zones on the west coast and that "these are considered part of the heritage of the area". The Scoping Report fails to consider this and indicates that no further assessment will be conducted on the Cultural Heritage. It is strongly recommended that an assessment of this heritage, including the shipwreck record and maps should be conducted. There are numerous shipwrecks along this section of the coastline that potentially range in age from the days of the Portuguese navigators and Dutch East India Company to the late 20th century. The rich cultural history record evidenced along this coastline must be considered and the impact of this application assessed against this heritage. Of critical importance in this regard is the fact that as of 1 April 2021 the indigenous leaders of this region must be consulted as they are now considered Traditional Leaders with Traditional Authorities. The Scoping Report fails to identify them or the Dept of COGTA as key stakeholders.

1.2.3 Climate change and carbon emissions The report fails to address carbon emissions adequately. This issue speaks to the overall issue of the needs and desirability analysis component of the "Guideline on need and desirability in terms of the EIA Regulations (Notice 819 of 2014). This section " includes, but is not limited to, describing the linkages and dependencies between human well-being, livelihoods and ecosystem services applicable to the area in question, and how the proposed development's ecological impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.). Although the Scoping Report identifies this in Table 7 and presents the needs and desirability analysis undertaken for the project (page 27), it then references Section 9 of the Report. This section does not adequately address this issue in sufficient depth and further work is required on this. In particular, the contradiction between the proposed activity and increasing carbon emissions

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and the Namakwa District's Climate Change policy and adaptation plan must be explored. The National Spatial Development Framework describes Namakwa as an arid region and it is anticipated that it will be impacted heavily by climate change (NSDF 2019 in COGTA 2020:9) . One of its strengths has been the attention to climate change from both NGOs and the Northern Cape Government and considerable work has been done on adaptation (See for example SKEP 2009, CSA supported work Bourne et al., 2012, Sowman, Raemaekers and Francis 2018, ABALOBI and Coastal Livelihoods Foundation 2019). It is noted that mining has caused visible and dramatic damage throughout the district and this clearly impacts the resilience of the area (Bourne et al., 2012: 52) and raises questions about adaptation interventions that do not address this major driver of coastal damage which undermines adaptation efforts. Much of the work on adaptation emphasises the need to ensure that ecosystems health is maintained in order to maximise resilience. The extensive climate change research in the region has enabled the production of a map of areas important for resilience of biodiversity to climate change at the landscape scale (Bourne et al., 2012). The authors argue that ensuring that these areas remain in a natural or near-natural state will allow ecosystems and species to adapt naturally to climate change, thus supporting healthy landscapes and the ability of ecosystems to continue to provide ecosystem services. They should be considered vital elements of protecting the NDM's ecological infrastructure in the face of climate change, as these currently provide ecosystem services to the local communities, decreasing their vulnerability to climate change (Bourne et al., 2012). In facilitating a community-based Rapid Vulnerability Assessment to assess Climate Change impacts Sowman, Raemaekers and Francis (2019) found that there are a range of socio-economic, governance and environmental stressors impacting the community and shaping climate change resilience. Key amongst these was the impacts of inshore dumping and beach mining on the Inshore dumping and beach mining on lobster and fish habitats (Sowman et al 2019:3). According to Sowman et al (2019) and subsequent work by Coastal Livelihood's Foundation and ABALOBI (2019), climate change in the form of less predictable weather patterns, extreme weather events, an increase in severe storms, changing prevailing winds or changes in species abundance and migration patterns are negatively affecting the livelihoods of small-scale fisher communities, and directly threatening the lives of small-scale fishers in Hondeklipbaai (2019). This change in environment is resulting in less fishing days, shorter fishing times, fishers facing challenges in planning, due to more dangerous and less predictable fishing weather and in some cases fatalities. Interventions to build adaptation included training in safety at sea, enhancing maintenance of safety at sea programs and financial training for members of the SSF cooperative (CLF and ABALOBI 2019). As part of the CSA supported work done by Bourne et al., (2012), they cite the study undertaken as part of the NDM's disaster risk reduction planning by Du Plessis (2010 a and b) aimed at identifying and rating all the potential hazards faced by communities. Significantly Du Plessis drew directly on the communities' own indigenous knowledge during this process of identifying these hazards. Bourne et al., (2012)

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report that Du Plessis (2010c:15) has argued, the ‘overutilisation of natural resources puts extreme pressure on the environment especially in areas that are prone to fluctuations in rainfall. This can lead to environmental degradation and other hazards such as soil erosion’, which are a powerful threat to individuals and communities dependent on their natural environment for a living’. (Du Plessis 2010a:16). Very importantly, Du Plessis argued that “Many people are already living at their threshold of being able to cope” (Du Plessis 2010 in Bourne et al., 2012: 74). (Source Bourne et al., 2012:71) Unsurprisingly, the local IDP (2017-2022) identifies coastal communities as particularly vulnerable to climate change. It provides considerable information on this stating that “Changes in climate change such as variable rainfall patterns, drying trends and expected temperature increases will negatively impact on the District’s marine and aquatic systems. The District is likely to experience frequent and more intense extreme weather events such as droughts and storms. Rising sea levels will pose a potential risk to small coastal communities, while warming seas may impact on fishing communities as water temperatures may not be suitable for the current catch” (IDP 2017-2022:49). It then also outlines specific steps towards adaptation and mitigation.

Manage Impact on Marine and Benthic Ecosystems

1. Identify and conserve coastal areas that are rich in biodiversity.
2. Develop a research project in collaboration with SANBI, aimed at providing environmental feedback to coastal communities.
3. Conduct research which seeks to understand the impacts of mining and how climate change exacerbates the industries impact.

Manage Loss of Land due to Sea Level rise

1. Educate communities on dangers of living in high water mark areas, in collaborations with Department of Environmental Affairs and Department of Environment & Nature Conservation.
2. Ensure climate change is incorporated in the Disaster Management Plan.
3. Develop short term emergency response plans for evacuation of communities.
4. Revise the Spatial Development Framework to recognise areas where communities should or should not settle.
5. Develop a long term relocation plan for communities residing in vulnerable areas.
6. Reinforce the Coastal Management Act through the Disaster Management and Infrastructure Departments.

Manage Increased Damage to Property from Sea Level Rise

1. Educate communities of danger of living in high water mark areas, in collaboration with Department of Environmental Affairs and Department of Environment and Nature Conservation.
2. Revise the Spatial Development Framework.
3. Reinforce the Coastal Management Act through the Disaster Management and Infrastructure Departments.

(IDP 2017-2022:49). There is a complete lack of institutional coherence between this Adaptation Plan and the proposed activity that aims to ultimately contribute towards increased extraction of natural resources. This overall lack of institutional coherence across national and provincial levels, the driving impacts of poverty and the lack of in resilience is highlighted the work of Bourne et al., (2012). “Poor people have limited assets and are more dependent on common property resources for their livelihoods. Poverty reduction is therefore dependent on how effectively we conserve biodiversity” and reduced vulnerability is dependent

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on how effectively we reduce poverty. (Du Plessis 2010:44 in Bourne et al., 2012:74). Of great relevance to this Scoping Report is their conclusion that adaptive capacity in the Namakwa District is low. They define adaptive capacity as “a function of ‘wealth, technology, education, information, skills, infrastructure, access to resources, and stability and management capabilities’ (McCarthy et al., 2001:18 in Bourne et al., 2012). Adaptation to climate change should not be viewed in isolation but instead ‘in the context of social, economic, and political conditions, all of which shape local community vulnerability and people’s ability to cope with and adapt to change’ (Quinn et al, 2011:1). The alleviation of vulnerability status depends on building resilience generally in communities through education, health, and service delivery and the development of viable and sustainable alternative livelihoods. Critically, for the NDM where people are directly dependent on the health and functionality of their natural resource base, ecosystems-based measures that ensure the restoration and maintenance of key biodiversity and ecosystem services and processes should be prioritised. Bourne et al (2012:74) argue that resilient communities “first and foremost, have access to alternatives – diverse livelihoods options grounded in healthy bio-diverse ecosystems” (Bourne et al 2012:74). The destruction to their natural coastal ecosystems upon which healthy alternative livelihoods like tourism might depend is an ever present back-drop to any work on climate change adaptation and until this glaring inconsistency is addressed it is not clear how any adaptation will be sustainable. Oil and gas mining represents an ongoing threat in this regard, as does seismic activity that might undermine their natural resource base further. This issue is not adequately addressed in the Scoping Study. The NSDF (2019) make specific proposals for the Namakwa region such as: regional adaptation, economic diversification and agriculture innovation at scale, limit expansion and development of settlements, enhanced regional cross provincial collaboration, strong compacts with role-players, enhanced ICD linkages, discouraging temporary settlements such as mining or large-scale construction projects etc (NSDF, 2017: P171 in Namakwa DM Profile COGTA 2020:9 (underline my emphasis). This obvious lack of fit between the vulnerability to climate change, low levels of resilience and proposed adaptation strategies and the continued authorization of mining without considering the climate impacts of mining is of concern. The proposed project aims to identify oil and gas resources to be used in the energy production and/ or processing or manufacturing of materials and in this regard will further contribute towards climate impacts. The Scoping Report does not adequately address this issue. Although the question is posed in the Needs and Desirability section: Does the proposed project exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. de-materialised growth)? This is not adequately answered in Section 9 as indicated. 1.2.4 Strategic Growth for the Region The PGDS identifies the promotion and development of the Marine and Aquaculture Sector and indicates that the marine side of fishing has a definite nodal tendency focused on Alexander bay, Port Nolloth and Hondeklip Bay based on infrastructure, conditions and initiatives. In terms

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of aquaculture the PGDS notes that the development of aquaculture as a sector provides an opportunity to diversifying agriculture in the province. The potential of value addition activities in the sector is also high. There is a potential conflict of interest here that needs to be addressed as the Spatial Development Plan of 2014 identified a fishing and mariculture corridor along this coastline and this is not adequately reflected in the report. There is a need for a specialist social-economic report to address this lack of fit and to research the socio-economic impacts further.

7.1.1 List of key stakeholders The list of key stakeholders needs to specifically include the Small-scale Fisher cooperatives that now have rights in the area and this includes Port Nolloth and Hondeklipbaai. It should also include the Khoi-San Traditional Leaders and COGTA. Please kindly ensure that these groups and institutions are adequately consulted in all public participation processes going forward. It is noted that the report states that the following aspects will be disregarded at scoping since these are impacts of low to very low significance and that will be manageable under the mitigation measures to be included in the EMPr during the EIA phase.

- Cultural heritage impacts
- Socio-economic impacts

It is recommended that both of these aspects require further specialist assessment as their treatment in the Scoping Report is not comprehensive and there is considerable evidence that has a bearing on the need and desirability of this application that must be brought to the public's and authorities' attention.

Date 2021/04/29 Method Email

Comment

This application is located within Block 1 in the Exclusive Economic Zone located along the Northern Cape Coast. Block 1 is located offshore between Alexander Bay, extending south along the western coastline, including Port Nolloth, to approximately Hondeklip Bay and approximately 250 km offshore of the coast of the Northern Cape. It therefore also includes the two key traditional fishing communities of Port Nolloth and Hondeklipbaai who rely on the health of the ocean for their livelihoods. In addition, it lies adjacent to the culturally and historically important Namakwa District, home of the Khoi-San indigenous communities of the Richtersveld. Some of the indigenous communities who have lived along this coastline, including the Toppenaar of Namibia, for whom the sea is sacred, need to be adequately consulted as this project has potential risks for the well-being of the ocean eco-systems that play a key role in their livelihoods and cultural well-being.

Response

Thank you for the comment. EIMS has consulted with the local communities during the Scoping Phase and will continue to engage these communities during EIA Phase comment period as part of the public meetings and open days. Kindly note that the impact on the fishing communities along the coastline was assessed in great detail and has been assessed to be very low to low significance.

Date 2021/04/29 Method Email

Comment

1.1 Need for a Strategic Environmental Assessment (SEA) for this region Block 1 lies adjacent to

Response

Thank you for the comment. The legal mechanism and mandate for such an assessment fall

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a coastline that has been mined extensively for the past century. The destruction of this coastline and damage to marine and coastal life as well as cultural heritage is enormous. Whilst each prospecting or mining application is only considered with respect to the individual merits of each application, the cumulative impacts of all the various mining and extractive activities in this region requires a strategic environmental assessment (SEA). The public has the right to be aware of the cumulative impacts of the range of extractive activities in the region and to decide if this is desirable or needed in terms of the country's overall social, ecological and economic well-being.

outside the scope of the current assessment process, which is driven by the requirements of the National Environmental Management Act (Act No. 107 of 1998 – NEMA), the Environmental Impact Assessment (EIA) Regulations and the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002 – MPRDA). In terms of the cumulative impacts, with reference to the EIMS Impact Assessment Methodology included in the Scoping Report and in accordance with the requirements of the EIA Regulations, 2014, an assessment of each potentially significant impact in terms of cumulative impacts is undertaken by the EAP and the Specialist team and the results of these assessments were included and discussed in EIA Report, as well as the respective specialist reports. The Impact Assessment further makes provision for the prioritization of impacts identified in the case of cumulative impacts being identified. As such, cumulative impacts were identified and assessed in detail.

Date 2021/04/29 Method Email

Comment

1.2 Omissions from the report that need to be addressed during the EIA phase The Scoping Report regrettably fails to include reference to a number of critical policy and planning documents of relevance to this application. This is of specific relevance to the question of the impact of the proposed activities on atmospheric emissions and climate change profile of this already climate stressed region. In addition, it fails to consider existing literature that provides evidence of the great importance of this coastline to the country's cultural heritage and the customary rights of the local indigenous Khoi-San communities. These issues need specialist assessments and should be elaborated during the EIA phase.

Response

Thank you for your comment. It should be noted that the cultural heritage was considered as a key component of the proposed exploration activities, which exclude any drilling as part of this application. This is evidenced by the fact that one of the key alternatives considered for this project in the scoping report was the avoidance of the Marine Protected Area - The Namaqua Fossil Forest MPA. This MPA provides evidence of age-old temperate yellowwood forests from a hundred million years ago when the sea-level was more than 200 m below what it is today; trunks of fossilized yellowwood trees covered in delicate corals. These unique features stand out against surrounding mud, silt and gravel habitats. The fossilized trees are not known to be found anywhere else in our oceans and are valuable for research into past climates. In 2014 this area was recognised as globally important and declared as an EBSA. A key consideration of this alternative included the recommendation that the 3D Seismic area falling within the MPA, as well as the recommended 5 km buffer, be excluded from the 3D Seismic area . EIMS undertook a broad public participation call to register period which included advertisements, notice placement in the local towns adjacent to the entire Block 1 area. EIMS also held public open days in Alexander Bay, Port Nolloth and Hondeklip Bay during the Scoping Report Comment Period to engage with the local communities. A second round of public open days will again be held during the EIA Phase comment period. With regards to atmospheric emissions and the impact on climate change, kindly note that this project only relates to exploration, and excludes any drilling activities. As such, such the impact of this project on climate change is not deemed to be significant. Should viable hydrocarbon reserves be identified, or future drilling be undertaken as part of the activities, then this will require separate authorisation and would have to be assessed at that stage.

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Comment

1.2.1 Cultural Heritage There has been extensive scholarship exploring the palaeontology, geology, historical biology and archaeology of this coastal region around Hondeklipbaai (Pether 1986, 1994, Hart 2017, Govender 2019), due to its rich geological deposits and the evidence it provides of early life. The geology of this area is complex, involving the interaction of three different systems namely fluvial, marine and aeolian systems. Both the marine and the coastal systems are extremely rich in resources. The Benguela current upwelling has historically left a very nutrient-rich footprint on this coastline in the form of onshore deposits rich in palaeontology and archaeology (Pether et al. 2000 in Govender 2019:1). The region in and around Hondeklipbaai contains a wide variety of significant heritage resources ranging from palaeontology and historical biological data, Middle and Late Stone Age shell middens to maritime archaeology (Hart 2016). Both the animal and human heritage is significant. For example, a rich Cenozoic palaeontological heritage exists from a few onshore deposits along South Africa's west coast that span the Mio-Pliocene and significant early Pliocene cetacean marine fauna, that is, early aquatic mammals such as whales, dolphins and seals, have been found here (Govender 2019). Govender describes Hondeklip Bay as a Zanclean, early Pliocene, locality. Cetacean fauna from Hondeklip Bay includes the mysticetes: Balaenopteridae indet. (sp. 1), cf. Eschrichtius sp., Balaenopteridae indet., cf. Plesiobalaenoptera, Balaenidae indet., and the odontocetes: Physeteroidea indet, cf. Livyatan, and an unidentified neonate delphinid. Hondeklip shares a seal and cetacean taxon with Langebaanweg, which is 430 km to the south. Cf. Eschrichtius sp. from Hondeklip Bay is the first description of the taxon from South Africa and it also has the first balaenid described from South Africa. Its cetacean fauna also strengthens the links of South Africa's west coast with the Atlantic of Europe and North America, and eastern North and South Pacific (Govender 2019:1). A wide range of palaeontology fossil resources has been found in the Hondeklipbaai area (Pether 2008). Some of the most notable of these include marine molluscan fauna of Namaqualand coastal deposits (Kensley & Pether, 1986), the first extinct Tertiary barnacle recorded from South Africa was described from Hondeklip by Pether (1990) and Brunton & Hiller (1990) have described the fossil brachiopods collected by Hart in the Hondeklip study area. Pether (1994b) provided detail on the exposures and palaeontology at Hondeklipbaai that have contributed to the presence of extensive diamonds along the coastline (Pether, 2008 in Hart 2016). Hart notes that numerous artefacts found in caves attest to the use of the Namaqualand coast during the late Pleistocene (Hart 2016:18). Sites dating back to the Middle Stone Age that have been found often include shellfish fossils, and hence it is hypothesized that there was occupation of this shoreline during the interglacial periods. He observes that the archaeological sites just north of Hondeklipbaai in the Koingnaas area are rich in both bone artefacts as well as local fauna and that within the many

Response

Thank you for your comment and thank you for the breakdown of the cultural heritage provided. It should, however, be noted the activities proposed as part of this project would not include any direct or indirect impacts on the heritage or palaeontological environments due to the fact that no invasive exploration techniques will be employed and will only make use of 3D survey techniques. EIMS Included the South African Heritage Resources Agency (SAHRA) in our process and we received the following comment from this agency regarding the application: "The DSR addresses cultural and heritage resources under section 8.8, on page 121, and identifies the Namaqua Fossil Forest Marine Protected Area (MPA) as the only nearby heritage resource. The proposed 3D survey area would have encompassed a section of the Namaqua Fossil Forest MPA and its 5 km buffer zone, however, an adjustment to the proposed 3D survey area has already been made to exclude this MPA and its buffer zone... ..As the survey area excludes the Namaqua Fossil Forest MPA, and the seabed will not be disturbed, no heritage impact assessment is required at this stage. However, if exploration drilling, and/or any other activity that may disturb the seabed is considered at a later stage of the project, a heritage impact assessment by a maritime heritage specialist will be required." EIMS takes note of the suggestion to include COGTA and the Khoisan Traditional Leaders. We will engage with these organizations regarding their inclusion in the project.

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stone age middens in this area, signs of ritual activity such as the burying of tortoise carapaces and carapace bowls have been identified (Orton, J. Hart, T. and Halkett, D. 2005). Hart (2016) noted that the use of whale bones (particularly ribs) by the early 'Strandlopers' in the construction of their huts has been well documented. Hart (2016) warned that there are shipwrecks in the surf zones on the west coast and that "these are considered part of the heritage of the area". The Scoping Report fails to consider this and indicates that no further assessment will be conducted on the Cultural Heritage. It is strongly recommended that an assessment of this heritage, including the shipwreck record and maps should be conducted. There are numerous shipwrecks along this section of the coastline that potentially range in age from the days of the Portuguese navigators and Dutch East India Company to the late 20th century. The rich cultural history record evidenced along this coastline must be considered and the impact of this application assessed against this heritage. Of critical importance in this regard is the fact that as of 1 April 2021 the indigenous leaders of this region must be consulted as they are now considered Traditional Leaders with Traditional Authorities. The Scoping Report fails to identify them or the Dept of COGTA as key stakeholders.

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Comment

1.2.3 Climate change and carbon emissions The report fails to address carbon emissions adequately. This issue speaks to the overall issue of the needs and desirability analysis component of the "Guideline on need and desirability in terms of the EIA Regulations (Notice 819 of 2014). This section " includes, but is not limited to, describing the linkages and dependencies between human well-being, livelihoods and ecosystem services applicable to the area in question, and how the proposed development's ecological impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.). Although the Scoping Report identifies this in Table 7 and presents the needs and desirability analysis undertaken for the project (page 27), it then references Section 9 of the Report. This section does not adequately address this issue in sufficient depth and further work is required on this. In particular, the contradiction between the proposed activity and increasing carbon emissions and the Namakwa District's Climate Change policy and adaptation plan must be explored. The National Spatial Development Framework describes Namakwa as an arid region and it is anticipated that it will be impacted heavily by climate change (NSDF 2019 in COGTA 2020:9) . One of its strengths has been the attention to climate change from both NGOs and the Northern Cape Government and considerable work has been done on adaptation (See for example SKEP 2009, CSA supported work Bourne et al., 2012, Sowman, Raemaekers and Francis 2018, ABALOB and Coastal Livelihoods Foundation 2019). It is noted that mining has caused visible and dramatic damage throughout the district and this clearly impacts the resilience of

Response

Thank you for your comment. With regards to atmospheric emissions and the impact on climate change, kindly note that this project only relates to exploration, and excludes any drilling activities. As such, such the impact of this project on climate change is not deemed to be significant. Should viable hydrocarbon reserves be identified, or future drilling be undertaken as part of the activities, then this will require separate authorisation and would have to be assessed at that stage. Kindly note that the impact on the fishing communities and their associated fish resource base along the coastline was assessed in great detail and has been assessed to be very low to low significance (refer to Section 9 of the EIA Report).

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the area (Bourne et al., 2012: 52) and raises questions about adaptation interventions that do not address this major driver of coastal damage which undermines adaptation efforts. Much of the work on adaptation emphasises the need to ensure that ecosystems health is maintained in order to maximise resilience. The extensive climate change research in the region has enabled the production of a map of areas important for resilience of biodiversity to climate change at the landscape scale (Bourne et al., 2012). The authors argue that ensuring that these areas remain in a natural or near-natural state will allow ecosystems and species to adapt naturally to climate change, thus supporting healthy landscapes and the ability of ecosystems to continue to provide ecosystem services. They should be considered vital elements of protecting the NDM's ecological infrastructure in the face of climate change, as these currently provide ecosystem services to the local communities, decreasing their vulnerability to climate change (Bourne et al., 2012). In facilitating a community-based Rapid Vulnerability Assessment to assess Climate Change impacts Sowman, Raemaekers and Francis (2019) found that there are a range of socio-economic, governance and environmental stressors impacting the community and shaping climate change resilience. Key amongst these was the impacts of inshore dumping and beach mining on the Inshore dumping and beach mining on lobster and fish habitats (Sowman et al 2019:3). According to Sowman et al (2019) and subsequent work by Coastal Livelihood's Foundation and ABALOBI (2019), climate change in the form of less predictable weather patterns, extreme weather events, an increase in severe storms, changing prevailing winds or changes in species abundance and migration patterns are negatively affecting the livelihoods of small-scale fisher communities, and directly threatening the lives of small-scale fishers in Hondeklipbaai (2019). This change in environment is resulting in less fishing days, shorter fishing times, fishers facing challenges in planning, due to more dangerous and less predictable fishing weather and in some cases fatalities. Interventions to build adaptation included training in safety at sea, enhancing maintenance of safety at sea programs and financial training for members of the SSF cooperative (CLF and ABALOBI 2019). As part of the CSA supported work done by Bourne et al., (2012), they cite the study undertaken as part of the NDM's disaster risk reduction planning by Du Plessis (2010 a and b) aimed at identifying and rating all the potential hazards faced by communities. Significantly Du Plessis drew directly on the communities' own indigenous knowledge during this process of identifying these hazards. Bourne et al., (2012) report that Du Plessis (2010c:15) has argued, the 'overutilisation of natural resources puts extreme pressure on the environment especially in areas that are prone to fluctuations in rainfall. This can lead to environmental degradation and other hazards such as soil erosion', which are a powerful threat to individuals and communities dependent on their natural environment for a living'. (Du Plessis 2010a:16). Very importantly, Du Plessis argued that "Many people are already living at their threshold of being able to cope" (Du Plessis 2010 in Bourne et al., 2012: 74). (Source Bourne et al., 2012:71) Unsurprisingly, the local IDP (2017-2022) identifies coastal communities as particularly vulnerable to climate change. It

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provides considerable information on this stating that “Changes in climate change such as variable rainfall patterns, drying trends and expected temperature increases will negatively impact on the District’s marine and aquatic systems. The District is likely to experience frequent and more intense extreme weather events such as droughts and storms. Rising sea levels will pose a potential risk to small coastal communities, while warming seas may impact on fishing communities as water temperatures may not be suitable for the current catch” (IDP 2017-2022:49). It then also outlines specific steps towards adaptation and mitigation.

Manage Impact on Marine and Benthic Ecosystems

1. Identify and conserve coastal areas that are rich in biodiversity.
2. Develop a research project in collaboration with SANBI, aimed at providing environmental feedback to coastal communities.
3. Conduct research which seeks to understand the impacts of mining and how climate change exacerbates the industries impact.

Manage Loss of Land due to Sea Level rise

1. Educate communities on dangers of living in high water mark areas, in collaborations with Department of Environmental Affairs and Department of Environment & Nature Conservation.
2. Ensure climate change is incorporated in the Disaster Management Plan.
3. Develop short term emergency response plans for evacuation of communities.
4. Revise the Spatial Development Framework to recognise areas where communities should or should not settle.
5. Develop a long term relocation plan for communities residing in vulnerable areas.
6. Reinforce the Coastal Management Act through the Disaster Management and Infrastructure Departments.

Manage Increased Damage to Property from Sea Level Rise

1. Educate communities of danger of living in high water mark areas, in collaboration with Department of Environmental Affairs and Department of Environment and Nature Conservation.
2. Revise the Spatial Development Framework.
3. Reinforce the Coastal Management Act through the Disaster Management and Infrastructure Departments. (IDP 2017-2022:49).

There is a complete lack of institutional coherence between this Adaptation Plan and the proposed activity that aims to ultimately contribute towards increased extraction of natural resources. This overall lack of institutional coherence across national and provincial levels, the driving impacts of poverty and the lack of in resilience is highlighted the work of Bourne et al., (2012). “Poor people have limited assets and are more dependent on common property resources for their livelihoods. Poverty reduction is therefore dependent on how effectively we conserve biodiversity” and reduced vulnerability is dependent on how effectively we reduce poverty. (Du Plessis 2010:44 in Bourne et al., 2012:74). Of great relevance to this Scoping Report is their conclusion that adaptive capacity in the Namakwa District is low. They define adaptative capacity as “a function of ‘wealth, technology, education, information, skills, infrastructure, access to resources, and stability and management capabilities’ (McCarthy et al., 2001:18 in Bourne et al., 2012). Adaptation to climate change should not be viewed in isolation but instead ‘in the context of social, economic, and political conditions, all of which shape local community vulnerability and people’s ability to cope with and adapt to change’ (Quinn et al, 2011:1). The alleviation of vulnerability status depends on

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building resilience generally in communities through education, health, and service delivery and the development of viable and sustainable alternative livelihoods. Critically, for the NDM where people are directly dependent on the health and functionality of their natural resource base, ecosystems-based measures that ensure the restoration and maintenance of key biodiversity and ecosystem services and processes should be prioritised. Bourne et al (2012:74) argue that resilient communities “first and foremost, have access to alternatives – diverse livelihoods options grounded in healthy bio-diverse ecosystems” (Bourne et al 2012:74). The destruction to their natural coastal ecosystems upon which healthy alternative livelihoods like tourism might depend is an ever present back-drop to any work on climate change adaptation and until this glaring inconsistency is addressed it is not clear how any adaptation will be sustainable. Oil and gas mining represents an ongoing threat in this regard, as does seismic activity that might undermine their natural resource base further. This issue is not adequately addressed in the Scoping Study. The NSDF (2019) make specific proposals for the Namakwa region such as: regional adaptation, economic diversification and agriculture innovation at scale, limit expansion and development of settlements, enhanced regional cross provincial collaboration, strong compacts with role-players, enhanced ICD linkages, discouraging temporary settlements such as mining or large-scale construction projects etc (NSDF, 2017: P171 in Namakwa DM Profile COGTA 2020:9 (underline my emphasis). This obvious lack of fit between the vulnerability to climate change, low levels of resilience and proposed adaptation strategies and the continued authorization of mining without considering the climate impacts of mining is of concern. The proposed project aims to identify oil and gas resources to be used in the energy production and/ or processing or manufacturing of materials and in this regard will further contribute towards climate impacts. The Scoping Report does not adequately address this issue. Although the question is posed in the Needs and Desirability section: Does the proposed project exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. de-materialised growth)? This is not adequately answered in Section 9 as indicated.

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Comment

1.2.4 Strategic Growth for the Region The PGDS identifies the promotion and development of the Marine and Aquaculture Sector and indicates that the marine side of fishing has a definite nodal tendency focused on Alexander bay, Port Nolloth and Hondeklip Bay based on infrastructure, conditions and initiatives. In terms of aquaculture the PGDS notes that the development of aquaculture as a sector provides an opportunity to diversifying agriculture in the province. The potential of value addition activities in the sector is also high. There is a potential conflict of interest here that needs to be addressed as the Spatial Development Plan

Response

A detailed specialist assessment has been undertaken to assess the impact of the proposed exploration activities on the fishing communities along the coastline. As is detailed in the Section 9 of the EIA Report and the Fisheries Specialist Study, the following fishing sectors were considered. Please refer to section 9 of the EIA report. With reference to the table on the impact on fishery sector, it should be noted that there is little to no overlap between the fishing effort recorded over the recent periods with the actual 3D Seismic survey area and that the majority of the sectors would not be impacted by the proposed project. For Demersal Longline, Tuna Pole-

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of 2014 identified a fishing and mariculture corridor along this coastline and this is not adequately reflected in the report. There is a need for a specialist social-economic report to address this lack of fit and to research the socio-economic impacts further.

Line, Traditional Linefish, Small-Scale Fisheries and Fisheries Research sectors, low significance impacts were identified with the implementation of mitigation measures based on standard industry practice. With reference to the table above, it should be noted that there is little to no overlap between the fishing effort recorded over the recent periods with the actual 3D Seismic survey area and that the majority of the sectors would not be impacted by the proposed project. For Demersal Longline, Tuna Pole-Line, Traditional Linefish, Small-Scale Fisheries and Fisheries Research sectors, low significance impacts were identified with the implementation of mitigation measures based on standard industry practice.

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Comment

1.2. 5 List of key stakeholders The list of key stakeholders needs to specifically include the Small-scale Fisher cooperatives that now have rights in the area and this includes Port Nolloth and Hondeklipbaai. It should also include the Khoi-San Traditional Leaders and COGTA. Please kindly ensure that these groups and institutions are adequately consulted in all public participation processes going forward. It is noted that the report states that the following aspects will be disregarded at scoping since these are impacts of low to very low significance and that will be manageable under the mitigation measures to be included in the EMPr during the EIA phase. • Cultural heritage impacts • Socio-economic impacts It is recommended that both of these aspects require further specialist assessment as their treatment in the Scoping Report is not comprehensive and there is considerable evidence that has a bearing on the need and desirability of this application that must be brought to the public's and authorities' attent

Response

Thank you for your comment . It should, however, be noted the activities proposed as part of this project would not include any direct or indirect impacts on the heritage or palaeontological environments due to the fact that no invasive exploration techniques will be employed and will only make use of 3D survey techniques. EIMS takes note of the suggestion to include COGTA and the Khoisan Traditional Leaders. We will engage with these organisations regarding their inclusion in the project. EIMS Included the South African Heritage Resources Agency (SAHRA) in our process and we received the following comment from this agency regarding the application: "The DSR addresses cultural and heritage resources under section 8.8, on page 121, and identifies the Namaqua Fossil Forest Marine Protected Area (MPA) as the only nearby heritage resource. The proposed 3D survey area would have encompassed a section of the Namaqua Fossil Forest MPA and its 5 km buffer zone, however, an adjustment to the proposed 3D survey area has already been made to exclude this MPA and its buffer zone... ..As the survey area excludes the Namaqua Fossil Forest MPA, and the seabed will not be disturbed, no heritage impact assessment is required at this stage. However, if exploration drilling, and/or any other activity that may disturb the seabed is considered at a later stage of the project, a heritage impact assessment by a maritime heritage specialist will be required." A detailed specialist assessment has been undertaken to assess the impact of the proposed exploration activities on the fishing communities along the coastline. As described above, it should be noted that there is little to no overlap between the fishing effort recorded over the recent periods with the actual 3D Seismic survey area and that the majority of the sectors would not be impacted by the proposed project. For Demersal Longline, Tuna Pole-Line, Traditional Linefish, Small-Scale Fisheries and Fisheries Research sectors, low significance impacts were identified with the implementation of mitigation measures based on standard industry practice.

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Comment

Dear Cheyenne Please kindly check the English version you attached. There is a mistake with regard to the dates for comment. Its says January to February 2021? Surely this is incorrect? thank you Jackie Sunde

Response

Thank you for your correspondence. That is correct, there was an error in the first correspondence however, an updated version was distributed with the correct dates: 26th March 2021 to the 29th April 2021. Please can you confirm if you received the updated correspondence? Please feel free to contact EIMS if you have any further queries.

Date 2021/05/04 Method Email

Comment

Dear Cheyenne Please kindly check the English version you attached. There is a mistake with regard to the dates for comment. Its says January to February 2021? Surely this is incorrect? thank you Jackie Sunde

Response

Thank you for your correspondence. My sincere apologies for the error in the original notice. Please can you confirm if you received the amended notice sent on the 26th March 2021 with the amended dates. Kindly note that the review and comment period runs from the 26th March 2021 until the 29th April 2021. Should you have any comments or queries please feel free to contact EIMS.

Date 2021/08/16 Method Email

Comment

Dear Ms Matshona Please can you tell me when comments on the EIA Report are due?

Response

Dear Jackie, Thank you for your correspondence and enquiry. Please note that the public review and commenting period for the EIA phase will come to an end on the 3rd September 2021 and all comments on the EIA Report are to be submitted to EIMS by that date. Please note that all comments received will be included in the final EIA Report for submission to the Competent Authority. Should you have any further comments please feel free to contact EIMS.

Date 2021/08/16 Method Email

Comment

Dear Mr Kriel, My name is Jackie Sunde and i am a registered I&AP for the TOSACO application for Block 1 exploration. Please can you clarify some information for us. In April the Hondeklipbaai women's group were under the impression that they had registered as I&APs - Ms Carisa Soudien is the key contact person. They also believe that they have submitted a petition to TOSACO. Please could you clarify why their details do not appear in the Public Participation list in the EIAR annexure? thank you very much

Response

Dear Jackie, Thank you for your correspondence and for bringing this information to our attention. Kindly note that EIMS did not receive a registration form from Ms Carisa Soudien on behalf of the Hondeklipbaai Women's Group during any of the public consultation engagements undertaken for the project earlier in the year. Please note that we also did not receive the petition mentioned below. However, during the recent Public Open Day held on the 19th August 2021 in Hondeklip Bay we have discussed the matter with Ms Carisa and she confirmed that they had not yet registered on the project's I&AP Database. Kindly note that Ms Carisa has now filled in the registration form as presented to her on the recent public open day and going further she will be informed of opportunities to participate in the Environmental Impact Assessment Process as they become available. Once again, we thank you for bringing this into our attention, please feel free

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to contact EIMS should you have any further queries or comments.

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Comment

1. Request for a Strategic Environmental Assessment (SEA) prior to any authorization The Atlantic coastline and ocean waters off the West and North coast of South Africa play a very critical role in the provisioning of fish stocks which in turn support an important fisheries sector comprising both commercial and small-scale, including artisanal and subsistence fisheries. These fishing activities play a critical role in the livelihoods and food security of thousands of households. There is an increasing number of applications for off-shore mining in this region, including both oil and gas and other minerals. For this reason it is requested that an SEA be conducted for this region prior to any further extractive activities in the ocean being authorized.

Response

Thank you for the comment. The legal mechanism and mandate for such an assessment fall outside the scope of the current assessment process, which is driven by the requirements of the National Environmental Management Act (Act No. 107 of 1998 – NEMA), the Environmental Impact Assessment (EIA) Regulations and the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002 – MPRDA).

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2. Marine Spatial Planning Act (MSP) and planning processes The MSP Act has commenced and planning for implementation is now underway. In terms of this ACT, Section 3 (2), it is requested that this application be suspended until the Marine Map for this region has been completed and the location of Critical Biodiversity Areas including EBSAs identified and their importance clearly articulated for all stakeholders so that informed consent can be given to any activities that will impact these important areas. Furthermore, the MSP mapping process requires the full and effective participation of all stakeholders in the region including indigenous peoples of the Richtersveld and the local communities of Port Nolloth, Kleinzee, Kommagas and Hondeklipbaai.

Response

Thank you for your comment. The EIA Report and Specialist Assessment has considered the latest versions of the MPAs, EBSAs, CBAs, ESAs and VMEs, and has specifically investigated and determined the level of risk associated with the proposed survey and with due consideration of the habitat and ecological function provided by these sensitive areas. Accordingly, the recommended alternative avoided the most sensitive of these altogether and included an additional buffer zone which affords additional protection to the EBSAs. As a result, it is submitted that the importance of these areas has been highlighted and the environmental risks associated with the proposed exploration activities have been assessed – thereby providing the stakeholders with the information required to make informed comment in this regard.

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Comment

3. Public Participation process and accessibility of documentation. Whilst a public meeting has been held in two of the coastal towns, the documentation for this application has not been available in a summarized form in the mother tongue languages of the majority of the population. This is a very technical report and should be made available in an accessible medium in order that public participation and consultation is adequate in terms of NEMA.

Response

Thank you for your comment. EIMS would like to point out that EIMS undertook several physical public open days in the towns along the coast with the intention to physically engage the local communities and present the findings of the EIA to them. Meetings were undertaken in Alexander Bay, Port Nolloth and Hondeklip Bay during April 2021, and in Alexander Bay, Port Nolloth, Kleinzee and Hondeklip Bay during August 2021 in in order to include I&APs from those areas. During each of the meetings the information was communicated in Afrikaans, and explained in a non-technical manner whenever required. Following the meetings August 2021, a summary of the EIA was provided in Afrikaans and English to all registered interested and affected parties.

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Additionally, a virtual meeting was held on 27 August 2021 in response to certain stakeholders' requests who could not attend the physical open days and as such the meeting was meant to include a larger audience and to augment the physical meetings. Furthermore, it should be noted that owing to the requests from the fishing communities, EIMS applied for an extension of the EIA timeframe in order to specifically meet with these communities and fishing co-operatives. These meetings were held in Port Nolloth, Kleinsee and Hondeklip Bay and served to present the findings directly to the fishing communities and co-operatives and also to gather information on where these communities undertook their fishing activities, with the view of augmenting the information in the EIA Report. These meetings were attended by the fisheries specialist that compiled the fisheries mapping and report. Considering the above, EIMS is of the opinion that the stakeholders have had sufficient opportunity to obtain the required information and to submit their comments in this regard.

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Comment

4. Flawed selection of Specialist Assessments The two Specialist Assessments were contracted and undertaken during the scoping stage. These specialist reports failed to engage with the coastal users and rights holders in this area. Most importantly, the Fisheries Assessment includes sections that are largely cut and paste versions of many other reports undertaken by the same consultants for other mining activities in the region. They are biased towards large, quantitative data sets that are developed largely for the large commercial fisheries sector. They do not adequately capture the nuances of the small-scale, artisanal fisheries in this region that depend on their catches for their own food security. For eg, Figure 3.18 "An overview of the spatial distribution of catch taken by the line-fish sector in the South African EEZ and in relation to Licence Block 1 and the proposed 3D seismic survey acquisition area" indicates that less than 100 tonnes is caught in the zone under discussion and hence the authors conclude". Whilst the authors do acknowledge that " Spatial mapping of effort and catches in the line fishery is less accurate than in other sectors because of the reporting structure implemented by DFFE." (Capp 2021:36), the inclusion of these figures with the spatial maps is misleading and does not adequately convey the relative importance of line fishing for the local communities' survival. Snoek is a huge contributor to basic food security and income for this sector. It is argued that it is insufficient to only include spatial maps – the value of the catch and the relative percentage of the catch that contributes to food security must be included in the assessment – either in a specialist socio-economic assessment or must be part of the Terms of Reference for the Fisheries Assessment. Had the I&APs had the opportunity to comment during the Scoping stage on the proposed specialist assessments this could have been addressed however they were prejudiced as they were not afforded this opportunity.

Response

Thank you for your comments. EIMS commissioned the specialist studies prior to the EIA Phase, since it was determined at an early stage that the EIA would need to investigate these those specific aspects in greater detail. It is our interpretation that the EIA Regulations do not preclude specialist studies from being undertaken during the scoping phase. It is also noted that these studies were revised and amended based on the outcomes of the scoping phase. This also increased the ability to accurately describe the receiving environment and it was a proactive step taken to ensure that there are fewer gaps when it comes to the EIA phase. In fact, this provided the I&APs with better, more accurate information and, as such, it cannot be said that their ability to comment on the specialist studies was impeded. EIMS submits that this provided additional time and information to the I&APs with which a better understanding of the project could be gained, and as a result, a more informed decision could be made as to the information to be refined considered, investigated and refined during the EIA Phase. It should also be noted that EIMS specifically applied for additional time to consult with the small-scale fishers and other community members and have given serious consideration to the comments and inputs from the local communities. Consequently, it is EIMS' contention that conducting the assessments in this way, provided greater transparency and opportunity for informed comment and scrutiny by I&APs and the Competent Authority and can thus not be considered to be irregular. It should further be noted that the I&APs and public open day attendees had access to the information generated by the specialist team at scoping phase.

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Comment

5. No proper modelling of acoustic impacts on marine mammals The report generalizes data external to this specific application site and proposed activity in terms of acoustic impacts. This report does not explain the specific impacts anticipated in this specific area and as a result it is not clear how the impact levels can be accurately assessed.

Response

Thank you for your comments. As part of the marine ecological assessment, a detailed breakdown was provided of the anticipated effects of the sound generated by the airgun array during the 3D survey on each of the organism groups and it was deemed to be of low enough significance not to have to do acoustic modelling at this stage, especially given the limited time that the survey would be undertaken for. The noise effects described included physiological effects (physical injury/permanent threshold shift (PTS) and temporary threshold shift (TTS)) and behavioural disturbance. Acoustic Modelling was not proposed in the Plan of Study for EIA and this was subsequently accepted by the Competent Authority. With reference to the Spectrum Multi Client Reconnaissance Application and the acoustic modelling study, it is understood that one of the areas overlaps with a portion of the proposed Tosaco area of interest. The acoustic modelling conducted for this study, found that the impacts would all be of low significance.

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Comment

6. Failure to adequately acknowledge the contribution of this area to very significant Cenozoic palaeontological heritage A very rich Cenozoic palaeontological heritage exists in this region, evidence from onshore deposits along South Africa's west coast that span the Mio-Pliocene and significant early Pliocene cetacean marine fauna, that is, early aquatic mammals such as whales, dolphins and seals, have been found here (Govender 2019). Govender describes Hondeklip Bay as a Zanclean, early Pliocene, locality. Cetacean fauna from Hondeklip Bay includes the mysticetes: Balaenopteridae indet. (sp. 1), cf. Eschrichtius sp., Balaenopteridae indet., cf. Plesiobalaenoptera, Balaenidae indet., and the odontocetes: Physeteroidea indet, cf. Livyatan, and an unidentified neonate delphinid. Hondeklip shares a seal and cetacean taxon with Langebaanweg, which is 430 km to the south. Cf. Eschrichtius sp. from Hondeklip Bay is the first description of the taxon from South Africa and it also has the first balaenid described from South Africa. Its cetacean fauna also strengthens the links of South Africa's west coast with the Atlantic of Europe and North America, and eastern North and South Pacific (Govender 2019:1). This very rich and important evidence of regional and inter-continental importance suggests that any acoustic activities that will impact aquatic mammals in the region, most notably the whales and dolphins should trigger a Specialist Heritage Assessment in conjunction with the Marine Faunal Assessment. The absence of adequate data on the impact of the seismic survey on these aquatic mammals, coupled with the absence of adequate data on the impact on the species upon which the SSF fisheries depend results in a fatal flaw in this EIA. A precautionary approach must be followed and these activities should not be permitted prior to adequate

Response

Thank you for your comments. It should, be noted the activities proposed as part of this project would not include any direct or indirect impacts on the heritage or palaeontological environments due to the fact that no invasive exploration techniques will be employed and will only make use of 3D survey techniques. EIMS Included the South African Heritage Resources Agency (SAHRA) in our process and we received the following comment from this agency regarding the application: "The DSR addresses cultural and heritage resources under section 8.8, on page 121, and identifies the Namaqua Fossil Forest Marine Protected Area (MPA) as the only nearby heritage resource. The proposed 3D survey area would have encompassed a section of the Namaqua Fossil Forest MPA and its 5 km buffer zone, however, an adjustment to the proposed 3D survey area has already been made to exclude this MPA and its buffer zone... ..As the survey area excludes the Namaqua Fossil Forest MPA, and the seabed will not be disturbed, no heritage impact assessment is required at this stage. However, if exploration drilling, and/or any other activity that may disturb the seabed is considered at a later stage of the project, a heritage impact assessment by a maritime heritage specialist will be required." EIMS contends that there is sufficient information available, especially after the extended consultations undertaken by the fisheries specialists with the small scale fishers, and consequently, this does not amount to a fatal flaw.

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Jackie Sundae

modelling and investigation into the potential impacts disclosed.

Date 2021/10/04 Method Email

Comment

7. Socio-economic costs and risks outweigh the benefits The report states that “The proposed project aims to identify oil and gas resources. Given the location offshore, it is not anticipated that the exploration activities will contribute significantly to settlements or areas in terms of socio-economic returns” (Page 35). It notes further that it will not result in employment opportunities for local residents. Yet these communities and local coastal residents will carry the full risk of a blow out or oil spill as well as carrying the climate impacts of these activities.

Response

Thank you for your comments. It should be noted that the proposal only relates to reprocessing of existing information and a possible 3D Seismic Survey. EIMS would like to reiterate, that as pointed out above, it cannot be said with absolute certainty that exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the need and desirability or impacts of such activities given that the specific details of these potential future activities are not known. It should further be noted that the life cycle of the current project is limited to the exploration activities as stated in the various reports and this has been the focus of the Scoping and EIA Process. It is in our view premature to assess the likely impacts of further invasive exploration activities or production activities as the extent, duration, location, and magnitude applicable to these activities are unknown at this stage. There is provision in law for these activities to be assessed on their merits as and when they are proposed.

Date 2021/10/04 Method Email

Comment

8. Failure to address climate change impacts The Northern Cape Namaqua coastline is already a vulnerable ecosystem in terms of climate changes. The report fails to address this issue adequately and should not be accepted on these grounds alone. The National Spatial Development Framework describes Namakwa as an arid region and it is anticipated that it will be impacted heavily by climate change, with scarcity of water a key climate risk (NSDF 2019 in COGTA 2020:9) . The Namakwa region is set to be significantly affected by future climate change trends (COGTA Profile 2020:9). Bourne et al., (2012), cite the study undertaken as part of the NDM’s disaster risk reduction planning by Du Plessis (2010 a and b) aimed at identifying and rating all the potential hazards faced by communities in this Northern Cape region. Significantly Du Plessis drew directly on the communities’ own indigenous knowledge during this process of identifying these hazards. Bourne et al., (2012) report that Du Plessis (2010c:15) has argued, the that “Many people are already living at their threshold of being able to cope” (Du Plessis 2010 in Bourne et al., 2012: 74). (Source Bourne et al., 2012:71). Unsurprisingly, the local IDP (2017-2022) identifies coastal communities as particularly vulnerable to climate change. It provides considerable information on this stating that “Changes in climate change such as variable rainfall patterns, drying trends and expected temperature increases will negatively impact on the District’s marine and aquatic systems. The District is likely to experience frequent and more intense extreme weather events such as droughts and storms.

Response

Thank you for your comments. Thank you for your comment. With regards to atmospheric emissions and the impact on climate change, kindly note that this project only relates to exploration, and excludes any drilling activities. As such, the impact of this project on climate change is not deemed to be significant. Should viable hydrocarbon reserves be identified, or future drilling be undertaken as part of the activities, then this will require separate authorisation and would have to be assessed at that stage. Kindly note that the impact on the fishing communities and their associated fish resource base along the coastline was assessed in great detail and has been assessed to be very low to low significance (refer to Section 9 of the EIA Report).

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Jackie Sundae

Rising sea levels will pose a potential risk to small coastal communities, while warming seas may impact on fishing communities as water temperatures may not be suitable for the current catch” (IDP 2017-2022:49). It then also outlines specific steps towards adaptation and mitigation. Manage Impact on Marine and Benthic Ecosystems 1. Identify and conserve coastal areas that are rich in biodiversity. 2. Develop a research project in collaboration with SANBI, aimed at providing environmental feedback to coastal communities. 3. Conduct research which seeks to understand the impacts of mining and how climate change exacerbates the industries impact (IDP 2017-2022:49). There is a complete lack of institutional coherence between this Adaptation Plan and the reality presented by the application in this EIA. Of great relevance to this case study is the conclusion of Bourne et al (2012), that adaptive capacity in the Namakwa District is low. They define adaptative capacity as “a function of ‘wealth, technology, education, information, skills, infrastructure, access to resources, and stability and management capabilities’ (McCarthy et al., 2001:18 in Bourne et al., 2012). Adaptation to climate change should not be viewed in isolation but instead ‘in the context of social, economic, and political conditions, all of which shape local community vulnerability and people’s ability to cope with and adapt to change’ (Quinn et al, 2011:1). The alleviation of vulnerability status depends on building resilience generally in communities through education, health, and service delivery and the development of viable and sustainable alternative livelihoods. Critically, for the NDM where people are directly dependent on the health and functionality of their natural resource base, ecosystems-based measures that ensure the restoration and maintenance of key biodiversity and ecosystem services and processes should be prioritised. Bourne et al (2012:74) argue that resilient communities “first and foremost, have access to alternatives – diverse livelihoods options grounded in healthy bio-diverse ecosystems” (Bourne et al 2012:74). The NSDF (2019) make specific proposals for the Namakwa region such as: regional adaptation, economic diversification and agriculture innovation at scale, limit expansion and development of settlements, enhanced regional cross provincial collaboration, strong compacts with role-players, enhanced ICD linkages, discouraging temporary settlements such as mining or large-scale construction projects etc (NSDF, 2017: P171 in Namakwa DM Profile COGTA 2020:9. This obvious lack of fit between the vulnerability to climate change, low levels of resilience and this application for seismic testing ahead of oil and gas mining without considering the climate impacts of the mining techniques is unacceptable.

Date 2021/10/04 Method Email

Comment

9. Need and desirability of the activity South Africa is now entering a time of extreme climate crisis. In some regions this is most evident, as the information above reveals. The country can no longer resort to extractive activities that result in excessive carbon emissions. In particular,

Response

Thank you for your comments. It is our contention that the need and desirability has been described sufficiently considering that the proposal only relates to 3D Seismic Survey. EIMS would like to reiterate, that as pointed out above, it cannot be said with absolute certainty that

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Jackie Sundae

we need to protect the ocean from all extractive activities that pose a risk of increased carbon emissions and damaging critical ecosystems upon which the ocean depends for sustaining life. Oil and gas exploration are not essential and South Africa cannot afford to destroy its biodiversity further. This applies to the country as a whole and to the Namaqua region specifically. For this reason oil and gas exploration and mining are no longer needed or desirable. The EIA Report says: "The IDP does not specifically mention the offshore activities or exploration". (page 33). It also states that the activity is NOT in the IDP for the area. This activity is not seen as part of the priorities for the resident communities and is not in the IDP as it is not desirable. On the contrary, as has been shown, in the adaptation plan for the region it is recommended that marine and coastal biodiversity be carefully protected and no further mining or large developments that will impact the natural ecosystems be considered. In the light of the above-mentioned concerns and issues it is hoped that this report will not be accepted.

exploration drilling, let alone production activities, will be undertaken in the future. As such, it is not currently possible to address the need and desirability of such activities given that the specific details of these potential future activities are not known. It should further be noted that the life cycle of the current project is limited to the exploration activities as stated in the various reports and this has been the focus of the Scoping and EIA Process. It is in our view premature to assess the likely impacts of further invasive exploration activities or production activities as the extent, duration, location, and magnitude applicable to these activities are unknown at this stage. There is provision in law for these activities to be assessed on their merits as and when they are proposed

Date 2021/10/05 Method Email

Comment

Dear EIMS RE: Please find my submission on the proposed TOSACO Offshore Block 1 Exploration Right EIA

Response

Dear Jackie, Thank you for your correspondence and comments. Please note that this is an acknowledgement of receipt of your comments on the DEIAR. A formal response to the comments will be issued to you in due time. Should you have any further queries, please feel free to contact EIMS.

Obakeng Molelu

Date 2021/03/24 Method Email

Comment

I would to register as an IAP. I am a Blue Economy researcher and interested in the extent of the oil and gas exploration and associated local socio-economic impacts in South Africa.

Response

Thank you for your correspondence with regards to the above mentioned project. Kindly note that you have been registered on the I&AP database for the project. As a registered I&AP you will be provided with the opportunity to comment on the scoping and EIA reports and associated appendices once they become available. Should you have any comments or queries please feel free to contact EIMS.

Tsili Tsidiza

Date 2021/04/09 Method Email

Comment

Good day sir/Madam I am Tsili Lekhema from Port Nolloth Northen Cape i just wanted to find

Response

Thank you for your correspondence. Kindly find attached notification outlining the details for the

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Tsili Tsidiza

out when are you guys having an Open day information session in the Port Nolloth/Alexanderbaai and Honderklipbay When, Where and what time

public open days to be held next week. Should you have any comments or queries please feel free to contact EIMS.

Paolo Esposito

Date 2021/04/30 Method Email

Comment

On behalf of Belton Park Trading 127 (Pty) Ltd, holder of mining rights over sea concession 2C & 2C, I acknowledge receipt of your email. Please note that the file you've circulated for registration seems to be corrupted and cannot be open – please kindly send it again. Please also note that you have approached I&AP on 23.03.2021, while you set a deadline at 19.03.2021. Please kindly review and amend date for submission of expression of interest and comments.

Response

Thank you for your prompt response. Kindly find attached the word version for the questionnaire. You may complete the questionnaire should you have any additional information to add however, kindly note that you were identified as a pre-identified affected I&AP and as such you are already registered on the I&AP database. Should you wish to have more one member of your organisation registered, an email will suffice. Further to the above please note that the previous dates were for the initial call to register period which allows I&APs to familiarise themselves with the project and register their interest however, registration for the project is open throughout the duration of the project. Furthermore, please note that the Scoping Report for the project was made available for public review and comment from today the 26th March 2021 until the 29th April 2021 for a 30-day period. A copy of the report is available on the EIMS website: <https://www.eims.co.za/2021/03/25/1415-tosacoexploration-right-application/>. I have attached the notification for your review. Please may I also request that all correspondence be sent to the dedicated project email address: tosacoer@eims.co.za. Should you have any comments or queries with regards to the attached please feel free to contact EIMS.

Date 2021/05/04 Method Email

Comment

Thank you for your email. Please find attached registration form with map evidencing the overlap of areas where currently exploration and mining activities are conducted. I look forward to hearing from you in due course.

Response

Dear Paolo, Thank you for your correspondence. Please note that your comments have been received and a formal response, if required, will be provided in due course. Should you have any further comments or queries please feel free to contact EIMS.

Date 2021/05/04 Method Email

Comment

Thank you for your email. Please find attached registration form with map evidencing the overlap of areas where currently exploration and mining activities are conducted. I look forward to hearing from you in due course.

Response

Dear Mr Esposito, EIMS thanks you for your comments. We take note of your operations within the Mining Concessions 2C and 3C. While Tosaco have applied for the reprocessing of existing information over the entire Block 1 area, we would like to point out that the potential survey operations are proposed to occur mainly within Mining Concession 5C and a small section of Mining Concession 5C, as per the map below. We do take note of the need to coordinate with

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Paolo Esposito

existing mining rights holders should Tosaco be awarded the Exploration Right. We thank you for your participation in this process. Please do not hesitate to contact EIMS should you have any additional queries or comments.

Werner Strauss

Date 2021/08/19 Method Email

Comment

Dear ms. Matshona, The above matter and the attached notification has reference. AfriForum is a non-profit organisation with its main purpose the protection of the constitutional rights of itsmembers and the communities to which our members belong. We act on behalf of our members in theKamiesberg Local Municipality's municipal area, who gave AfriForum the mandate to address the local government issues on their behalf. As such we would like to register as an Interested and Affected Party. Kindly provide us with the documents we need to complete to register to this e-mail address. Looking forward to your prompt response. Thank u

Response

Dear Werner, Thank you for your correspondence and interest in the project. Kindly note that you will be registered as an interested and affected party (I&AP) on the projects database. In order to complete the registration may you please provide me with the name of the contact person and their contact details, such as the email address, fax, cell phone number and or postal address. Please indicate if you are the contact person and if I could add your details as per your signature for registration. Further to the above, please find attached a I&AP registration form, may you kindly complete this and send it back to this email. Should you have further queries or comments, please do not hesitate to contact EIMS.

Janet Solomon

Date 2021/03/24 Method Email

Comment

Please may I register as an Interested and aAffected Party for the the above-mentioned application. I look forward to hearing from you.

Response

Thank you for your correspondence. Kindly note that you have been registered on the project database as an I&AP. As a registered I&AP you will be provided with an opportunity to comment on the Scoping and EIA reports once they become available. Should you have any comments or queries please feel free to contact EIMS.

Mr Anton Meyer

Date 2021/04/08 Method Email

Comment

I would like to register as I&AP for the EIA process of the proposed Tosaco Block 1 exploration right, EIMS Ref No 1415.

Response

Thank you for your correspondence. Kindly note that you have been registered on the project I&AP database. Kindly note that the Scoping report and associated appendices is currently available for public review and comment until the 29th April 2021. A copy of the report can be downloaded from the EIMS website: <https://www.eims.co.za/2021/03/25/1415-tosaco-exploration-right-application/>. Further to the above please note the details for the public open

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Mr Anton Meyer

days as per the document attached. Should you have any further queries or comments please do not hesitate to contact EIMS.

Date 2021/09/02 Method Email

Comment

Hi Sinalo Can you please confirm if you have someone from De Beers Marine on your I&AP mailing list for this proposed project?

Response

Dear Anton, Thank you for your correspondence. Kindly note that we have I&APs on the projects database from the De Beers Group of Companies. Kindly note that you were also registered as an I&AP on the projects database as a contact person for the Namaqualand Mines. May you please indicate if De Beers has a Marine Division that we can add to the I&AP database as the only people we currently have are from the De Beers Group of Companies. Please feel free to let EIMS know should you have any queries in this regard.

Mr Neville Van Rooy

Date 2021/08/25 Method Email

Comment

Good day can you please just, provide us a link for your virtual meeting, its quite a hassle still registering, Please Please

Response

Dear Neville, Thank you for your enquiry. Please access the registration for the webinar on this link:
https://teams.microsoft.com/registration/sU6H5z0n7kudxA2EINu4JA,iAKBatbrSU2qAUveW_L7Ag_AjAREdV7C0ONCQrPt_NeMIA,0QJcZ9INgEGUxaJ_inLJmw,i23YPcdNgkiPnkWArjRaQ,rz1MxKXLY02vMIDyNQDbwA?mode=read&tenantId=e7874eb1-273d-4bee-9dc4-0d8494dbb824
Kindly let me know if you have any further issues regarding the registration process.

Date 2021/08/25 Method Email

Comment

Good day can you please just, provide us a link for your virtual meeting, its quite a hassle still registering, Please Please

Response

Dear Neville, Please see the link for joining the meeting below. Kindly note you can join directly from the link. Webinar Link: https://teams.microsoft.com/j/meetupjoin/19%3ameeting_NDZIMWYwYjItYjA1MC00NmY4LTlkY2YtYjhkYWM0MmViNzZl%40thread.v2/0?context=%7b%22Tid%22%3a%22e7874eb1-273d-4bee-9dc4-0d8494dbb824%22%2c%22Oid%22%3a%2210ae63c1-352f-4edf-b0cfb0a1958921f8%22%2c%22prid%22%3a%22sU6H5z0n7kudxA2EINu4JA%2ciAKBatbrSU2qAUveW_L7Ag%2cAjAREdV_7C0ONCQrPtNeMIA%2c0QJcZ9INgEGUxaJ_inLJmw%2ci23YPcdNgkiPnkWArjRaQ%2crz1MxKXLY02vMIDyNQDbwA%2cFWI90moNGs28mBWM0PN8mQ%22%2c%22isPublic%22%3atrue%7d

Date 2021/10/04 Method Email

Comments and Responses 1415 Tosaco Energy Block 1 Exploration Right EIA

Mr Neville Van Rooy

Comment

Good day I hereby wish to inform you that I don't understand as to why is the Due date for submissions still today 4 October 2021 why it was not postponed since EIMS only had its first proper Focus group meetings with Kleinse Hondeklip bay 21/22 September ,not sure if there were meetings held in Alexanderbay, Porth Nolleth. This is not 30 days and therefore not enough time.

Response

Good day Neville, Thank you for your correspondence. EIMS would like to clarify that the following opportunities were provided to Interested and Affected Parties (I&APs) for reviewing and commenting on the Draft Environmental Impact Assessment Report (DEIAR): The DEIAR was initially made available for a 30-day public review and comment period from 3 August 2021 to 3 September 2021 in line with the EIA regulations. During this period, a number of open days were undertaken in Alexander Bay, Port Nolloth, Kleinzee and Hondeklip Bay in order to present the findings of the EIA Phase and provide I&APs an opportunity to raise their comments or concerns for consideration in the decision-making process. Additionally, a virtual public meeting was undertaken to allow for the I&APs who could not attend the physical open days an opportunity to interact with the project team as well as raise their comments on the EIA Phase findings. During both these meetings, concerns were raised regarding consultation with the small-scale fisheries and community adjacent to the proposed project area. To address this concern, an extension of the review and commenting period was applied for and approved by the competent authority to allow for further consultation with the small-scale fishing cooperatives and community in the area. The commenting period was extended for another 30 days from 3 September to 4 October 2021. During this period a number of focus group meetings were arranged with the identified small-scale fisheries and communities in Port Nolloth, Kleinzee and Hondeklip Bay from 20 September 2021 to 22 September 2021. It was emphasised in the meetings that the commenting period will be concluded on 4 October 2021, as previously communicated in the extension notification, and I&APs were encouraged to submit all their comments to EIMS by that date to ensure that their comments are included in the Final Environmental Impact Assessment for submission to the Competent Authorities within the set legal timeframe. Kindly note that EIMS did not provide for any further 30-day extension to the review and commenting period following the focus group meetings. Should you have any further queries in this regard, please feel free to contact EIMS.

Nico Jano

Date 2021/09/23 Method Email

Comment

Hi. My Name is Nico Jano from a NPC called NIDA (Namaqua Integrated Development Agency). We operate in the confines of the Namaqua region and would like to be registered as an Interested and Affected Party to the Tosaco Energy application.

Response

Dear Nico, Thank you for your correspondence and for showing interest in the below mentioned Project. Kindly note that you and your colleagues have been registered as an Interested and Affected Party (I&AP) on the projects database. As a registered I&AP you will be provided with the opportunity to participate in the Environmental Authorisation Application Process as they become available. Should you have any further queries or comments, please feel free to contact EIMS.