

Your ref: 11B12B

My ref: AP/GC/TEPSA

To: **SLR Consulting (South Africa) (Pty) Limited**  
5<sup>th</sup> Floor Newlands on Main Building  
Newlands, 7700

By Email: [csadan@slrconsulting.com](mailto:csadan@slrconsulting.com)  
[jessica.hughes@slrconsulting.com](mailto:jessica.hughes@slrconsulting.com)

And to: **The Petroleum Agency South Africa (PASA)**  
Tygerpoort Building  
7 Mispel Street  
Bellville 7530  
Cape Town

By Email: [mushwanas@petroleumagencysa.com](mailto:mushwanas@petroleumagencysa.com)  
[ngesip@petroleumagencysa.com](mailto:ngesip@petroleumagencysa.com)

20 August 2020

**Re. GREEN CONNECTION COMMENTS ON TEPSA BLOCK 11b/12B DRAFT SCOPING REPORT**

**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.

**B. ROLE OF PASA IRREGULAR AND TAINTS PROCEDURAL FAIRNESS**

2. It is submitted that the South African Agency for the Promotion of Petroleum Exploration and Exploitation (Pty) Ltd, known as the Petroleum Agency South Africa (Proprietary) Limited ("PASA"), is performing functions and making decisions in the environmental impact

assessment process that are *ultra vires* the empowering statute (the National Environmental Management Act<sup>1</sup> (NEMA)). To the extent that it is asserted that PASA has a lawful delegation of power to perform these functions and make these decisions, this is contested by Green Connection. The reasons for these submissions are set out below.

3. On 18 June 2004, the then Minister of Minerals and Energy designated<sup>2</sup> PASA to perform the functions set out in Chapter 6 of the Minerals & Petroleum Resources Development Act (MPRDA).<sup>3</sup> It is relevant to note that the Minister was exercising powers conferred in terms of section 70 of the MPRDA.
4. 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)<sup>4</sup>

5. It is pointed out that these functions do not extend to PASA making decisions regarding EIA processes, including EIA processes in terms of NEMA (applicable following the implementation of the 'one environmental system'). As is pointed out in the draft Scoping Report:

Since 8 December 2014, environmental regulation of... exploration...and related activities has been removed from the MPRDA and transferred to NEMA... As stated above, DMRE is the competent authority that authorises an application for EA...<sup>5</sup>

6. 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

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<sup>1</sup> 107 of 1998 (as amended).

<sup>2</sup> GN733 of 18 June 2004: *Designation of the Petroleum Agency South Africa (Proprietary) Limited for the purposes of the Petroleum Resources Development act, 2002 (Act No. 28 of 2002)*. Section 70 of the MPRDA provides that the Minister Mineral Resources may designate an organ of state or a wholly owned and controlled agency or company belonging to the State to perform the functions referred to in Chapter 6 of the MPRDA (Petroleum Exploration and Production).

<sup>3</sup> Act 28 of 2002 (as amended).

<sup>4</sup> Section 71(i). It is also relevant to note that PASA is obliged to (among other things): promote onshore and offshore exploration for and production of petroleum (s71(a)); receive applications (made under the MPRDA) for reconnaissance permits, technical co-operation permits, exploration rights and production rights in the prescribed manner (s71(b)); and evaluate such applications and make recommendations to the Minister (s71(c)).

<sup>5</sup> TEPSA Draft Scoping Report, Chapter 2, paragraph 2.2.4, p10.

where the listed activity is or is directly related to (among other things) exploration of a petroleum resource.

7. 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:

- (a) The Director-General of the Department of Minerals and Energy; or
- (b) Any officer in the department of Minerals and Energy.

8. 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.

9. It is also relevant to note that s42B of NEMA also does not include a power to subdelegate.<sup>6</sup>

10. The draft Scoping Report indicates that the '[t]he Minister of Mineral Resources and Energy (the Minister) is responsible for the granting of an EA for the application to undertake exploration in terms of NEMA'.<sup>7</sup> This is partially correct, as the Minister is identified in the NEMA EIA Regulations Listing Notice 2 as the competent authority where the listed activity is or is directly related to (among other things) exploration of a petroleum resource, and is thus empowered to grant an EA to undertake exploration activities under NEMA. The Minister is of course also empowered under NEMA to refuse EA for such an activity.

11. However, the draft Scoping Report also indicates with regard to PASA that:

The responsibility for granting EAs has been delegated down to DMRE. For oil and gas exploration, the responsibility for processing applications has been delegated to PASA. However, DMRE remains the competent authority for the EA decision-making process.

12. While it is correct that PASA has been designated to perform the functions set out in Chapter 6 of the MPRDA, this designation should not be confused with the Minister's powers under NEMA to delegate a function entrusted to him/her in terms of NEMA to the Director-General

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<sup>6</sup> Unlike s42(2)(d) of NEMA, which specifically provides that the Minister responsible for environmental matters may delegate a power or duty vested in him/her to the Director General, an MEC, the management authority of a protected area, or any organ of state (by agreement with that organ of state). In terms of s42(2)(a) this delegation must be in writing and may include the power to subdelegate.

<sup>7</sup> TEPSA draft Scoping Report, paragraph 2.2.2.

of the Department of Minerals and Energy or any officer in the department of Minerals and Energy.

13. Green Connection is not aware of any written delegation of functions by the Minister to PASA under NEMA. Even if there is such a delegation by the Minister (as well as any sub-delegation by the Director General DMRE or any officer in the DMRE) to PASA, it is submitted that any such delegation or sub-delegation would be *ultra vires* the empowering statute (NEMA).<sup>8</sup>
14. Notwithstanding that NEMA does not provide for the lawful delegation of NEMA EIA functions and decision-making powers related thereto to PASA (and that any such purported delegation would in any event be *ultra vires* the empowering provisions of NEMA or otherwise unconstitutional and unlawful), PASA has already performed, and it is indicated that it will continue to perform, various functions, including competent authority decision-making functions, during this multi-stage EIA decision-making process. This is evidenced by the following examples (among others):
  - PASA has performed the functions of the competent authority in accepting the application for authorisation, and is also the point of contact for the EIA consultant during the EIA process.
  - PASA has performed the functions of the competent authority and assigned case officer in relation to meetings held regarding and approval of a Public Participation Plan submitted by the EAP in terms of GN650 of 5 June 2020 - Directions Regarding Measures to Address, Prevent and Combat the Spread of COVID-19 Relating to National Environmental Management Permits and Licenses (COVID-19 Directions).<sup>9</sup> For example:

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<sup>8</sup> According to available information, while these delegations must be in writing, they are not publicly available. Messrs Herbert Smith Freehills South Africa LLP write that they submitted an information request in terms of the Promotion of Access to Information Act (PAIA) requesting copies of all of the Minister of Mineral Resources' delegations in terms of NEMA. As at 12 April 2019, the only delegation of authority granted by the Minister of Mineral Resources in terms of NEMA is reported to be dated 8 June 2015, and which empowers regional managers to approve, grant and refuse environmental authorisations, and Chief Directors: Mineral Regulations to amend environmental authorisations. See: <https://hsfnotes.com/africa/2019/04/12/decisions-by-regional-managers-may-be-unlawful/>

<sup>9</sup> See in particular Annexures 2 and 3 to the COVID-19 Directions, which make provision for (among other things): requests for pre-application meetings to be submitted to all Regional Offices (of the DMRE); Public Participation Plans to be submitted to and discussed with the relevant assigned case officer; and obtain agreement from the relevant competent authority on the Public Participation Plan (i.e. the DMRE).

A pre-application telephonic meeting was held with PASA on 08 April 2020. The aim of this meeting was to inform PASA of TEPSA's proposed applications and to obtain agreement on the way forward with its various application processes. This also included discussions of the implications of COVID-19 on the public participation.<sup>10</sup>

and

A meeting held with PASA on 10 June 2020 to discuss the approach to public participation following issuance of GN No. 650 of 5 June 2020 (Directions Regarding Measures to Address, Prevent and Combat the Spread of COVID-19 Relating to National Environmental Management Permits and License). A Public Participation Plan was submitted to PASA and approved by them on 15 June 2020, confirming the approach to be taken as described in this chapter.<sup>11</sup>

- The draft Scoping report indicates that PASA will perform the function of considering and accepting the final Scoping Report:

The final Scoping Report will be submitted to the delegated authority, the Petroleum Agency of South Africa (PASA), for consideration and acceptance as part of the application for Environmental Authorisation (EA) in terms of Chapter 5 of the National Environmental Management Act, 1998...<sup>12</sup> (emphasis added)

and

The final Scoping Report will be submitted to PASA for consideration and acceptance. If the report is accepted, the project will proceed to the ESIA phase.<sup>13</sup> (emphasis added)

- The draft Scoping Report indicates further that PASA will be involved in future decision-making processes, again conflating the functions and decision-making powers of PASA and the DMRE:

This ESIA Report and EMPr should be updated through an amendment application in terms of NEMA and Sections 29, 31 and 37 of the EIA Regulations 2014 (as amended), and submitted to PASA and the DMRE for review and decision. (emphasis added)

and

PASA/DMRE as the decision-making authority, will be responsible for taking all aspects of the environment, including whether or not the potential impacts of the project would unfairly discriminate against any person, into consideration when making a decision regarding the proposed project.<sup>14</sup> (emphasis added).

15. It is respectfully submitted that the various functions (including decision-making functions) performed by PASA during the EIA process should properly have been performed, and should in the future be performed, by the Minister of Mineral Resources, alternatively by the

<sup>10</sup> TEPSA draft Scoping report, paragraph 3.3.1.2.

<sup>11</sup> TEPSA draft Scoping Report, paragraph 4.2.2.1.

<sup>12</sup> TEPSA draft Scoping Report, paragraph 1.2.

<sup>13</sup> TEPSA draft Scoping Report, paragraph 3.3.1.7.

<sup>14</sup> TEPSA draft Scoping Report, paragraph 5.4, page 40.

Director-General of the Department of Minerals and Energy or an officer in the department of Minerals and Energy (acting under a lawful delegation from the Minister of Mineral Resources).

16. In the premises, it is submitted that:

- (a) the administrative actions and decisions undertaken by PASA during the NEMA EIA process were taken without PASA being authorised to do so by the empowering provision;
- (b) alternatively, should it be contended that PASA acted under a written delegation of power, the administrative actions and decisions undertaken by PASA during the EIA process were taken by PASA acting under a delegation of power which was not authorised by the empowering provision (NEMA).

17. As a consequence of PASA performing functions (including making decisions) that it is not empowered to do, alternatively that have been unlawfully or irregularly delegated or sub-delegated to PASA by the Minister and/or the DMRE, it is submitted that this environmental impact assessment process is fatally flawed.

18. This unlawfulness is compounded by the fact that in terms of the MPRDA, PASA's functions relating to offshore oil and gas exploration include the mandatory obligation to:

- (a) promote onshore and offshore exploration for and production of petroleum.<sup>15</sup>

It is submitted that, having regard to this mandatory function - as well as PASA's broader role as the designated agency - under the MPRDA, PASA is not and should not be held out to be a neutral, objective functionary in NEMA EIA processes.

19. In the premises, Green Connection calls upon:

- PASA to withdraw from the EIA process, and for the EIA process to recommence by way of an application submitted to and administered by a duly authorised DMRE functionary; and

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<sup>15</sup> Section 71(a).

- The DMRE not to abdicate its functions and decision-making powers as the competent authority in multi-stage NEMA EIA processes, and to ensure that PASA confines itself to the functions bestowed upon it in s71(i) of the MPRDA, namely to review and make recommendations to the Minister of Mineral Resources and Energy with regard to the acceptance of environmental reports and the conditions of the environmental authorisations and amendments thereto.

20. Notwithstanding the submissions made in this section, Green Connection's further comments on the EIA process and draft Scoping Report are provided in sections C to H below.

### **C. FLAWED PUBLIC PARTICIPATION AND UNLAWFUL PUBLIC PARTICIPATION PLAN**

21. On 13 July 2020, a letter written on behalf of Green Connection was emailed to the Assigned Case Officer of the DMRE, c/o PASA (and cc'd to the EAP). Among other things, it was pointed out in the letter that:

We have also been instructed to record Green Connection's concerns regarding this EIA process being conducted during the COVID-19 pandemic. As is recorded in paragraph 4.2.2.6 of the Draft Scoping Report, *'[d]ue to the COVID-19 restrictions, and in terms of Annexure 3 of GN. 650 of 5 June 2020, no open public meetings were allowed to take place during the Scoping Report review and comment period'*. As a consequence, an online public webinar is planned for registered I&APs, while any I&APs who wish to participate in this online meeting were required to confirm this by email by 25 June 2020. Given that the newspaper advertisements announcing the proposed project and availability of the Draft Scoping Report were placed on 19 June 2020, this time period is unreasonable. Green Connection are also concerned that this process excludes potential I&APs who do not have access to commercial newspapers, who do not have the means to access the Draft Scoping Report electronically, and who do not have the means to attend the virtual online webinar. Based on available information, no effort appears to have been made to notify or provide information to historically disadvantaged communities and subsistence fishers living along the Southern Cape coast (who could potentially be affected by any catastrophic incident such as a wellhead blowout) by other reasonable means. Such other means could include (but are not necessarily limited to) radio advertisements, local notices and hard copies of the EIA documentation in public spaces, and through community representatives and traditional authorities. Green Connection is of the view that this approach is flawed and does not meet the basic requirements of procedurally fair administrative action or the NEMA environmental management principles relating to public participation.<sup>16</sup>

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<sup>16</sup> In terms of section 2(1) of the National Environmental Management Act 107 of 1998 (NEMA), these principles apply to the actions of all organs of state that may significantly affect the environment. Of particular relevance:

- Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons (s2(4)(c));
- 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

22. On 17 July 2020, a letter in response was received from PASA advising that the timeframe for submission of the scoping report had been extended, and that:

This will also allow the EAP to consider additional public notification and consultation methods covering communities which may not have access to current methods used amidst the COVID-19 pandemic and associated lockdown restrictions.

A copy of the EAP's Public Participation Plan (PP Plan)<sup>17</sup> and a copy of the Minutes of a meeting between the EAP and PASA on 10 June 2020 were also provided in response to Green Connection's request.

- 22.1. It is noted from the Minutes that the EAP's PP Plan (as required by the COVID-19 Directions) was discussed, and that a PASA representative raised the following concern:

PN raised concern about how persons without access to computers would be able to participate. It was noted that I&APs who may want to challenge the process may raise this issue.<sup>18</sup>

An EAP representative responded by stating that directly affected parties (the fishing industry) all have access to electronic communication, and that 'it was unlikely that any disadvantaged community is affected by offshore exploration activities as has been illustrated during previous offshore activities'. PASA was requested to consider the PP Plan 'as soon as possible due to the tight programme that TEPSA is following for the future drilling programme'.

- 22.2. The draft Scoping Report indicates that the PP Plan submitted to PASA was 'approved by them on 15 June 2020'. With regard to the timeframes for public comment on the draft Scoping Report, the PP Plan indicates that it is 'proposed that these timeframes

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achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured (s2(4)(f));

- Decisions must take into account the interests, needs and values of all interested and affected parties... (s2(4)(g));
- Decisions must be taken in an open and transparent manner and access to information must be provided in accordance with the law (s2(4)(k)); and
- The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted (s2(4)(q)).

<sup>17</sup> Rev 1, June 2020.

<sup>18</sup> Notes of PASA Meeting, 10 June 2020, p2.

will... not deviate from the legislated 30-days'.<sup>19</sup> The PP Plan indicates further that the planned public consultation would not be 'particularly different to what has been undertaken in the past for projects located far offshore of the coast', with the only key difference being that 'planned public meetings would be held online and that hard copies of the reports would not be available in public locations'. The PP Plan states that:

Should any I&AP contact SLR to indicate that they are not able to access any of the online project reports or attend online meetings due to lack of internet connectivity, SLR will implement alternative means of providing the requested project information to these stakeholders. Such measures may include (but not limited to) the following:

- Sending hard copies of the comprehensive Executive Summary of the reports (which will be able to serve as standalone documents); and
- Having a telephonic discussion to answer any queries that I&APs may have regarding the proposed project.

SLR deems the above will ensure that a reasonable opportunity is provided for public participation for all I&APs and that I&APs will be provided with a reasonable opportunity to comment on the proposed application

Lastly, it is pointed out that the location of the proposed exploration activities are located sufficiently far offshore that they are not anticipated to have significant adverse effects on any vulnerable stakeholders who may not have access to the internet or other technological means of participating in the planned public participation process.<sup>20</sup>

This approach (incorrectly) assumes that all potential I&APs will have received notification of the proposed project and have the means to contact SLR, and unfairly limits the proposed public participation to providing a hard copy of the executive summary and a telephonic discussion. This approach also prematurely makes that assumption that the proposed exploration activities are not anticipated to have a significant adverse effect on 'vulnerable stakeholders' due to the location thereof, and fails to take into account that coastal communities and subsistence fishers (and their livelihoods) could be significantly impacted by shoreline oiling or loss of marine resources in the event of (for example) a worst-case scenario oil spill due to a wellhead blowout.

22.3. It is submitted that the PASA-approved PP Plan fails to ensure a fair process for prospective I&APs who do not have the means or ability to participate via electronic

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<sup>19</sup> At p6.

<sup>20</sup> At p6.

means. Rather than identifying additional means to ensure that such I&APs are included in the public participation process, the PP Plan provides for an even more limited form of public participation than the minimum required by the 'usual' NEMA EIA Regulations. This approach fails to make provision for I&APs who do not have the means or ability to participate via electronic means (including subsistence fishers and communities that live on the Southern and South West Cape Coast and/or rely on the economic opportunities afforded by, for example, tourism and ecotourism). It is submitted that the PP Plan does not meet the basic requirements of procedurally fair administrative action or the NEMA environmental management principles relating to public participation.

23. Also on 17 July 2020, an email was received from the EAP advising that the timeframe for commenting on the draft Scoping Report had been extended by 30 days, and that 'SLR is also considering various additional engagement opportunities'.
24. In order to ensure a procedurally fair and lawful public participation process, Green Connection submits that the EIA should be suspended until such time as the COVID-19 restrictions are lifted, alternatively until such time as effective notice and meaningful opportunities for public participation are afforded to historically disadvantaged coastal communities and subsistence fishers particularly those living along the Southern and South West Cape coast. Furthermore, it is submitted that since the determination of Alert Level 2 (applicable from 18 August 2020), the easing of restrictions (including on gatherings) provides further opportunity to give effective notice and afford meaningful opportunities for public participation to historically disadvantaged coastal communities and subsistence fishers particularly those living along the Southern and South West Cape coast.

#### **D. OIL SPILL MODELLING**

25. It is noted that the draft Scoping Report indicates that 'oil spill modelling will be undertaken concurrently and results will be used to inform the assessment of impacts ...'<sup>21</sup>
26. The oil spill modelling (OSM) has a critical role to play in the EIA given that it will 'provide supporting information for the use in other specialist studies'. These studies include (amongst others) the Marine Ecology Impact Assessment and Social Impact Assessment, which 'will gather data relevant to identifying and assessing environmental and social impacts (including

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<sup>21</sup> TEPSA draft Scoping Report, p211.

any associated cumulative impacts) that might occur as a result of the proposed exploration activities...'.<sup>22</sup> With regard to the Marine Ecology Impact Assessment, the draft Scoping Report states that it will identify, describe and assess the significance of potential impacts of the proposed drilling activities on the local marine fauna, and that '[t]hese should include impacts of... upset conditions on marine fauna using information from the... oil spill modelling'<sup>23</sup> study.

27. The draft Scoping report indicates as a 'general term of reference for the specialist studies' that they will '[d]etermine significance thresholds for limits of acceptable change'.<sup>24</sup> It is pointed out that these 'significance thresholds' are not specified.
28. With regard to the OSM study, the draft Scoping Report states that it will '[m]odel the trajectory and fate of crude oil over a 90-day period due to a blow-out spill under a 20-day blow-out scenario based on two spill locations in the block'.<sup>25</sup>
29. It is indicated further that the OSM study will '[p]resent modelled surface and shoreline oiling results as graphical outputs in relation to the drilling and include the assumptions, modelling parameters and any limitations of the modelling exercise'.<sup>26</sup>

***(a) OSM Study does not make provision for modelling worst-case scenario relating to duration of an uncontrolled oil spill***

30. It is noted that the draft Scoping Report states that '[t]his ESIA considers the current "worst-case scenario" when assessing impacts and developing mitigation measures'.<sup>27</sup>
31. However, draft Scoping Report indicates that the OSM study will model the trajectory and fate of crude oil spill due a blow-out spill under a 20-day blow-out scenario.
32. It is submitted that an assumed 20-day spill duration for a wellhead blow-out is not a worst case scenario:

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<sup>22</sup> TEPSA draft Scoping Report, p213.

<sup>23</sup> TEPSA draft Scoping Report, p215.

<sup>24</sup> TEPSA draft Scoping Report, p214.

<sup>25</sup> TEPSA draft Scoping Report, p214.

<sup>26</sup> TEPSA draft Scoping Report, p214.

<sup>27</sup> TEPSA draft Scoping Report, p29.

- By contrast, the *Deepwater Horizon* oil spill duration was 87 days (before it was finally capped).<sup>28</sup>
- By further contrast, oil spill modelling by RPS carried out in relation to an impact assessment conducted by ERM for the *Tamirand Resources – Tui Field* in New Zealand covered a 45-day and 110-day well blowout scenario.<sup>29</sup>
- A European Commission (EC) for a Regulation on Offshore Safety<sup>30</sup> technical peer review meeting report highlights, for example, that:

JRC and other Commission representatives questioned if using the lower duration interval (15-50 days) is appropriate. One study indicates that once a blowout remains out of control for more than 14 days, chances are higher that it can only be controlled within 50-80 days (to allow time to drill a relief well)...<sup>31</sup>

and

The Commission remarked that in the Maitland report of December 2011 (containing an independent review of the UK regulatory regime for offshore oil and gas), a recommendation has been made to plan for a worst-case scenario of 90 days for a blowout. In addition, JRC remarked that there is heightened public pressure for a "no expense spared" response to further offshore disasters and that the potential costs associated with future spills could rise as a result which should be taken into account when assessing costs. It was noted and agreed that none of the studies performed to-date had explicitly addressed these points.<sup>32</sup>

- In a 2015 peer-reviewed report commissioned by the Wilderness Society South Australia Inc. (WSSA) by Lebreton titled *Stochastic analysis of deep sea oil in the Great Australian Bight* (hereinafter referred to as the 'Lebreton report'),<sup>33</sup> it is pointed out

<sup>28</sup> <https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill>

<sup>29</sup> Technical Review of Oil Spill Modelling - Tamarind Taranaki Ltd. Application EEZ100016, conducted by Coffey on behalf of the New Zealand Environmental Protection Authority (26 June 2018), at pages 3 – 4. Available online at <https://www.epa.govt.nz/assets/FileAPI/proposal/EEZ100016/External-advice-and-reports-EPA-reports/Coffey-technical-review-oil-spill-modelling-v3-26-06-2018-EEZ100016.pdf>

<sup>30</sup> Which was subject to technical peer reviews by the EC in 2012, chaired by an independent representative of UK Health and Safety Laboratory, and was accompanied by an Impact Assessment regarding policy alternatives, their effects on risk reduction of a major offshore incident, and the costs associated with the implementation of the alternatives. See PEER REVIEW MEETINGS ON THE ASSESSMENT OF RISKS IN THE OFFSHORE OIL AND GAS INDUSTRY 28 MARCH 2012 & 2 MAY 2012 SUMMARY REPORT, available online at: [https://ec.europa.eu/energy/sites/ener/files/20120703\\_summary\\_report\\_en.pdf](https://ec.europa.eu/energy/sites/ener/files/20120703_summary_report_en.pdf)

<sup>31</sup> PEER REVIEW MEETINGS ON THE ASSESSMENT OF RISKS IN THE OFFSHORE OIL AND GAS INDUSTRY 28 MARCH 2012 & 2 MAY 2012 SUMMARY REPORT at p8, available online at: [https://ec.europa.eu/energy/sites/ener/files/20120703\\_summary\\_report\\_en.pdf](https://ec.europa.eu/energy/sites/ener/files/20120703_summary_report_en.pdf), citing *Report for Statoil ASA: Miljørisikoanalyse for letebrønn 30/6-28 Crux I Nordsjøen – App. 1 Technical note to blowout scenario analysis (DNV reference: 2011-0830 / 13GN2EA-2, Rev. 00, 2011-07-12)*.

<sup>32</sup> Ibid, p9.

<sup>33</sup> Lebreton (2015) *Stochastic analysis of deep sea oil in the Great Australian Bight*, p2. The report relates to a [then] proposed exploration drilling programme by British Petroleum (BP), joined by Norway's Statoil, in the Great Australian Bight (GAB). WSSA had expressed serious concerns regarding the likely impacts on the environmental values of marine ecosystems in the GAB, including [then] recently proclaimed Marine Parks, as well as over the oil spill response capabilities in a region where the oil industry was not established and did not

with regard to oil spill duration that estimating the release duration for a deep-water oil spill associated with a loss of well control event requires calculating the minimum time for the relief equipment to arrive on site and perform the blowout kill operations. BP's oil spill trajectory modelling study indicated two release duration scenarios: 35 days corresponding to the time required to place a capping system on the damaged well; and 158 days being the estimated time to drill a relief well. However, only the 35-day duration was used in the BP numerical modelling results as BP purported that this was the most credible worst case scenario. The choice of this duration was questioned by Australian Government officials. Lebreton indicates that the 35 day duration scenario was based on detailed logistics for the mobilisation and installation of a capping stack (see capping schedules shown in Tables 5 and 6 of the Lebreton Report).<sup>34</sup> Lebreton indicates that while best practice should be to take a conservative approach and use a release duration equivalent to the time required to drill a relief well, the 35 day and 87 day scenarios were selected to better compare with BP's modelling assessment.<sup>35</sup>

33. The duration of a blowout is clearly a key input to an OSM study. An assumed low duration will necessarily lower the prediction of the amount of oil that may be spilled into the ocean, and will also lower the significance of potential environmental and socio-economic impacts arising from any catastrophic spill.
34. In light of the above, and having regard to strong currents combined with frequent extreme weather and wave conditions in the area of interest that could frustrate any rapid response to a deep-sea or ultra-deep sea blow-out, it is submitted that the OSM study should also include a worst-case scenario duration of at least 87 days for a crude oil spill due to a wellhead blowout.

***(b) Terms of Reference for OSM study inadequate***

35. It is submitted that the Terms of Reference provided in the draft Scoping Report for the OSM study provide insufficient information to enable Green Connection to make meaningful comments.

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have significant support resources available locally like in the Gulf of Mexico. The Lebreton report presents an assessment of socio-economic and ecological impacts of deep water oil spill scenarios based on best available information and industry standard numerical modelling methods.

<sup>34</sup> Lebreton, p20.

<sup>35</sup> Lebreton, p21.

36. In particular, the Terms of Reference do not indicate (among other things):
- What the assumed flow-rate will be for the modelling, including a worst-case oil spill scenario assumed flow-rate;
  - What the assumed total volume of oil spilled into the ocean will be over the modelled durations, including worst-case scenario volumes (for example, the *Deepwater Horizon* oil spill released approximately 507,245m<sup>3</sup> of oil into the ocean over 87 days);
  - What critical threshold assumptions will be used for significant slick thickness and significant shoreline mass flux, including critical threshold assumptions that will be used to determine impacts on socio-economic resources;
  - That sub-surface spill modelling will be conducted, and if so how the magnitude and direction of currents used in any such sub-surface modelling will be determined (including variabilities in current instantaneous velocities, localisation, whether any jet and plume will be simulated, what information will be provided e.g. the diameter of the pipe from which the oil escapes to enable calculation of oil exit velocity, whether the distribution of oil on the sea floor from multiple pathways will be predicted etc.);
  - What the assumed viscosity of anticipated spilled crude oil will be; and
  - How underlying data informing the various assumptions made in the OSM study will be validated, especially where such data is provided by the applicant.
37. Assumptions made for the purposes of the OSM study have the potential to have a significant bearing on the results of the OSM study. In order for the OSM report to be credible and the EIA process procedurally fair, these assumptions should be clearly stated in the Terms of Reference, and I&APs should be afforded an opportunity to provide comment on these assumptions.
38. Furthermore, the OSM study will be incomplete (and inadequate) in the absence of modelling of the sub-surface plume. The draft Scoping Report should clearly indicate that the OSM study will include modelling of both surface slicks and sub-surface plumes, and that credible, validated data will be used to ensure that a realistic worst-case scenario is modelled.
39. Given that the OSM study results will be used to inform the assessment of impacts and are intended to provide supporting information for the use in other specialist studies (such as the Marine Ecology Impact Assessment and Social Impact Assessment), a flawed OSM study will in

turn undermine the credibility of any subsequent specialist studies (including the assessment of impacts carried out) that rely on its results.

40. A catastrophic oil spill can result in significant environmental and socio-economic impacts. It is for this reason that an EIA for offshore oil and gas exploration is a listed activity under NEMA, while a robust, accurate and objective OSM study is required in order to model (among other things) the potential ecological and socio-economic impacts of a worst-case scenario oil spill resulting from a wellhead blowout.

#### **E. 'INDEPENDENT' REVIEW OF CUTTINGS AND OIL SPILL MODELLING, PEER REVIEW MECHANISM**

41. It is noted that the draft Scoping Report indicates that the ESIA project team and specialists includes a Mr. Stephen Luger, whose role is described as 'independent review of drill cuttings and oil spill modelling'.<sup>36</sup>
42. No specific terms of reference provided are provided relating to this 'independent review', and as a consequence I&APs are unfairly precluded from commenting meaningfully thereon.
43. While no issue is taken regarding the independence of Mr. Luger from the applicant (within the meaning of 'independent' as described in the NEMA EIA Regulations), it is submitted that any review conducted by Stephen Luger should not be characterised as being independent of the EAP and the planned OSM study – as described in Table 3.1, Mr. Luger clearly forms part of the ESIA project team and specialists.
44. Green Connection submits that a credible peer review mechanism should be established as part of the EIA process for all specialist reports and impact assessment surveys. Green Connection submits further that the exact 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. I&APs should be afforded a reasonable opportunity to comment on the terms of reference and proposed peer reviewers.

#### **F. OIL SPILL CONTINGENCY PLAN AND BLOW-OUT CONTINGENCY PLAN**

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<sup>36</sup> Table 3.1.

45. It is noted that the draft Scoping Report indicates that '[although the probability of a well blow-out is extremely low, it is a worst-case scenario that provides the greatest environmental risk during drilling operations' and that 'TEPSA will have a Blow-Out Contingency Plan (BOCP) document in place that sets out its detailed response plan and intervention strategy, to be implemented in the event of a blow-out'.<sup>37</sup>
46. Emergency response is described in paragraph 6.4.3.7 of the draft Scoping Report, which indicates that:
- TEPSA has 'contract agreements in place with global response companies to use globally advanced capping stacks in the event of a well blow-out',<sup>38</sup>
  - one capping stack (10K) is kept at Saldanha Bay while another (15K) is based in Aberdeen (Scotland), and that these 'are available for global mobilisation by sea and/or air in the event of an incident';<sup>39</sup>
  - a capping stack 'weighs as much as 100 tonnes and requires co-ordinated logistical planning and execution in quickly transporting it to the emergency location';<sup>40</sup>
  - The mobilisation of these and other incident response equipment and services will be contained in TEPSA's OSCP and BOCP';<sup>41</sup> and
  - TEPSA has committed to a maximum duration for the installation of a capping stack within 20 days in the unlikely event of a blow-out'.<sup>42</sup>
47. No Oil Spill Contingency Plan (OSCP) or BOCP<sup>43</sup> has been included in the draft Scoping Report for comment, no terms of reference for these plans are included in the Draft Scoping Report, and the draft Scoping Report does not indicate whether or not these plans will be included in the draft EIA report set when made available to I&APs for comment.
48. It is submitted that the final Scoping Report should clearly indicate that an OSCP and BOSCP will be included in the draft EIA report document set. Among other things, these plans should deal with specific equipment that will be available (including any offshore drilling equipment

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<sup>37</sup> TEPSA draft Scoping Report, p58.

<sup>38</sup> TEPSA draft Scoping Report, p80.

<sup>39</sup> Ibid.

<sup>40</sup> Ibid.

<sup>41</sup> TEPSA draft Scoping Report, p81.

<sup>42</sup> Ibid.

<sup>43</sup> Such plans are distinguishable from South Africa's National Contingency Plan and Coastal Oil Spill Management Plans.

should a relief well need to be drilled), as well as the logistics informing actual response time etc. (such as – but not limited to - transport or shipping requirements for both the Saldanha Bay and Aberdeen capping stack mobilisation scenarios, implications of attempting to install a capping stack at a deep sea location in potentially adverse and challenging weather conditions, implications of having to drill a relief well should capping fail, and associated time requirements for all scenarios).

49. It is submitted that a failure to make these plans available for comment by I&APs during the EIA process will be procedurally unfair, and will result in any future decision on authorisation being unlawful and vulnerable to being set aside on appeal and/or judicial review.

#### **G. CLIMATE CHANGE - CUMULATIVE IMPACT, IMPACT ASSESSMENT & NEED AND DESIRABILITY**

50. Having regard to the global Climate Emergency<sup>44</sup> and South Africa's international commitment<sup>45</sup> 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'*<sup>46</sup> by reducing greenhouse gas (GHG) emissions, TEPSA'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).<sup>47</sup> 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, it is submitted that the cumulative impacts<sup>48</sup> of such GHG emissions need to be identified in the draft Scoping Report, and the impact thereof assessed in the next phase of the EIA process.

<sup>44</sup> <https://www.unenvironment.org/explore-topics/climate-change/facts-about-climate-emergency>

<sup>45</sup> As a party to the United Nations Framework Convention on Climate Change (UNFCCC) that ratified the Kyoto Protocol and adopted the Paris Agreement.

<sup>46</sup> See for example South Africa's *Intended Nationally Determined Contribution (INDC)*, available online at: <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/South%20Africa%20First/South%20Africa.pdf>

<sup>47</sup> <https://www.climatelinks.org/resources/greenhouse-gas-emissions-factsheet-south-africa>

<sup>48</sup> 'Cumulative impact' is defined in the NEMA EIA Regulations as follows: 'in relation to an activity, means the past, current and reasonably foreseeable future impact of an activity, considered together with the impact of activities associated with that activity, that in itself may not be significant, but may become significant when added to the existing and reasonably foreseeable impacts eventuating from similar or diverse activities.'

51. It is noted that while a climate change assessment was identified by the National Screening Tool, it was excluded from the draft Scoping Report. The rationale provided for this exclusion is set out in Table 3.2 of the draft Scoping Report, which states:

*Excluded:* No air quality or climate change assessments will be undertaken as the proposed exploration activities would have limited contribution to air emissions and will not occur in the vicinity of any sensitive receptors (i.e. onshore communities). The emission volumes will, however, be estimated in order to address any greenhouse gas emission reporting requirements.<sup>49</sup>

It is submitted that this rationale fails to take into account the cumulative impact, namely the 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.

52. It is also noted that the Brulpadda exploration well was completed in 2018/2019, and is reported in the draft Scoping Report as having been successful in yielding a significant gas condensate discovery.<sup>50</sup> Based on available information, a further four exploration wells<sup>51</sup> are planned for the Paddavissie Fairway<sup>52</sup> where the Brulpadda prospect is located. This Paddavissie Fairway also falls within in Block 11B/12B. It is submitted that the draft Scoping Report needs to further motivate the need for a further ten exploration wells when four planned (and authorised) exploration wells located in the same Block have not yet been drilled.
53. Green Connection submits further that the EIA should address the implications of climate change on oceans. The Intergovernmental Panel on Climate Change<sup>53</sup> 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. 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 the proposed exploration drilling activities.

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<sup>49</sup> TEPSA draft Scoping Report, p25.

<sup>50</sup> TEPSA draft Scoping Report, p1.

<sup>51</sup> <https://businesstech.co.za/news/energy/297918/total-makes-major-gas-discovery-off-the-coast-of-south-africa/>

<sup>52</sup> <https://www.africaenergycorp.com/operations/south-africa-block-11b-12b/>

<sup>53</sup> [https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap22\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap22_FINAL.pdf)

## H. KEY ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS

54. Green Connection submits that a number of key impacts have not been identified in the Table 8.3 Aspects and Impacts Register, including (but not necessarily limited to):

- Climate Change (see previous section of this report), including the cumulative impacts of other wells and associated activities being carried out or planned for Block 11B/12B, as well as other wells and associated activities being carried out in or planned for adjacent Blocks and elsewhere in South Africa's Exclusive Economic Zone;
- Socio-Economic impacts of a worst-case scenario oil spill due to a wellhead blow-out (including but not limited to impacts on subsistence fishers and communities that live on the Southern and South Western Cape coast or who rely on the economic opportunities afforded by (for example) tourism generally and ecotourism), as well as associated clean-up costs (including a clear statement of who bears these cost). It is pointed out that no Socio-Economic Impact Assessment Report is included in the Plan of Study;
- Impacts of a worst-case scenario oil spill in the ocean column and on the ocean floor;
- Impacts associated with the use of 'Subsea Dispersion' in the event of a worst-case scenario oil spill;<sup>54</sup>
- Potential impacts of a worst case scenario oil spill due to a wellhead blowout on Marine Protected Areas (MPAs), Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) that straddle or are located in the vicinity of Block 11B/12B, and which could be impacted by the trajectory and fate of any surface or sub-surface plume; and
- Potentially severe consequences to life and health of workers in the event of a catastrophic event (e.g. explosion of drilling rig);

55. It is submitted that the above should be identified in the draft Scoping Report as key environmental and socio-economic impacts, and should be appropriately assessed during the environmental impact assessment phase of this EIA process.

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<sup>54</sup> TEPESA draft Scoping Report, p81. The draft Scoping Report indicates that, as part of its well response strategy, 'TEPESA would also initiate the mobilization of the SubSea Dispersion (SSDI) kit from OSRL. Considering the harsh environment and strong currents in the area, its deployment, however, is not guaranteed. Nevertheless, this option will remain open for any exceptional good weather window.'

Signed at Durban this 20<sup>th</sup> day of August 2020

A handwritten signature in black ink, appearing to read 'Adrian Pole', written in a cursive style.

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Adrian Leonard Pole