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From:

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Comments on the Final Environmental Impact Assessment Report to Support the Application for Environmental Clearance Certificate (ECC) for the Proposed 2D Seismic Survey covering the area of interest (AOI) in the Petroleum Exploration License (PEL) No. 73, Kavango Sedimentary Basin, Kavango West and East Regions, Northern Namibia

By virtue of sec. 23 of the EIA Regulations, Natural Justice, a registered I&AP, submits the following comments, suggestions for considerations and response by the Environmental Assessment Practitioner ("EAP"), and submission to the relevant competent authorities as per sec. 7(1) and 7(2) of the EIA Regulations. Please confirm receipt thereof

Introduction

Reconnaissance Energy Namibia (Pty) Ltd (Reconnaissance Energy) is proposing to conduct a 450 km long seismic survey for hydrocarbon resources that overlaps with an international conservation area and sensitive habitat for endangered, threatened and vulnerable species. The purpose of the project is to discover hydrocarbon resources that Reconnaissance Energy would develop upon receiving its production permit. In March 2021, Reconnaissance Energy

completed an environmental impact assessment (EIA) that recommended the proposed seismic surveys proceed.

Article 95 of the Constitution frames the interpretation of the applicable legal requirements. This Article mandates that the "State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the following:…(l) maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future." As discussed in more detail below, the purpose of the proposed project is inconsistent with this principle of sustainable development and the EIA is inadequate because it failed to conduct the minimum studies necessary to comply with applicable law, including the 2012 Environmental Impact Regulations.

I. The Environmental Impact Assessment failed to study the need and desirability of the project.

The Environmental Impact Assessment failed to conduct a need and desirability analysis, violating the minimum requirements of the 2012 Environmental Impact Assessment Regulations.

An environmental impact assessment must have, among other things, "a description of the need and desirability of the proposed listed activity and identified potential alternatives to the proposed listed activity, including the advantages and disadvantages that the proposed activity or alternatives have on the environment and on the community that may be affected by the activity."[1] The assessment must also contain a "description and comparative assessment of all alternatives identified during the assessment process."[2] In order to understand the need and desirability, the project should assess consistency with applicable laws, guidelines, and regulations.[3]

Applicable policies here are partly determined by where the "key Areas of Interest" for this project overlap with the Kavango-Zambezi Transfrontier Conservation Area. The purpose of the Kavango-Zambezi Transfrontier Conservation Area is "to sustainably manage the Kavango Zambezi ecosystem, its heritage and cultural resources based on best conservation and tourism models for the socio-economic wellbeing of the communities and other stakeholders in and around the eco-region through harmonization of policies, strategies and practices."[4] The EIA

[1] Section 15(2)(d), Environmental Impact Assessment Regulations 2012 (EIA Regulations, 2012).
[2] *Id.* at Section 15(2)(f), EIA Regulations, 2012.
[3] *Id.* at Section 4(c).
[4] Kavango Zambezi Transfrontier Conservation Area, About Us, https://www.kavangozambezi.org/en/about/about-kaza.

acknowledges that "minerals, geothermal energy, and petroleum [] are unfortunately not mentioned under KAZA vision."[5]

In this case, the EIA failed to conduct a need and desirability analysis that examines how the project aligns with applicable laws and policies.[6] In the EIA, the project proponent assessed the "No-Action Alternative"[7] and lists some potential benefits of the project.[8] However, the EIA provides no analysis as to whether these benefits are either necessary or desirable ways of achieving any national, provincial, or local policy. Indeed, many benefits that the project lists, such as "foreign direct investments" and "training of Namibians" could be achieved by attracting other foreign direct investment, such as investments in renewables, that align much better with Namibia's applicable policies and local land use character.[9] The EIA does not discuss how the proposed project, whose purpose is to survey for petroleum, aligns with the Kavango-Zambezi Transfrontier Conservation Area's goal of achieving the "best conservation and tourism models for the socio-economic wellbeing of the communities."

The EIA does not also discuss how the proposed project's purpose aligns with the government's policy on Community Based Natural Resource Management. Since the country's independence in 1990, Community Based Natural Resource Management (CBNRM) has proven again and again to be an important instrument for the Government of Namibia to meet its goals with respect to conservation and sustainable development. CBNRM has been developed as a sustainable development programme form which local and indigenous communities have been able to derive equitable social and economic benefits, with the intention to create long term sustainability, good governance and proper management of the CBNRM programme for the benefit of all Namibian citizens. Namibia has gained a worldwide reputation for its innovative approaches of linking conservation to poverty alleviation through its CBNRM programme and pro-poor tourism initiatives, with the CBNRM programme recognizing the rights and development needs of local communities, recognizing the need to promote biodiversity conservation and empowers present and future generations to manage and benefit from natural resources. Given this, the CBNRM Programme (in particular the community conservancies operating through the Kapinga Kamwalye Conservancy and the George Mukoya Conservancy) which has been operating since 1992, have contributed considerably to meeting National conservation and development goals. This is reflected in national ordinances such as

[5] Reconnaissance Energy Namibia (Pty) Ltd, Final Environmental Impact Assessment (EIA) Report to Support the Application for Environmental Clearance Certificate (ECC) for the Proposed 2D Sesimic Survey covering the Area of Interest (AOI) in the Petroleum Exploration License (PEL) No. 73, Kavango Sedimentary Basin, Kavango West and East Regions, Northern Namibia (Final EIA), p. 199 (March 2021).

[6] Ministry of Environment and Tourism, National Policy on Community Based Natural Resource Management (2013) https://www.met.gov.na/files/files/CBNRM_20Policy%20Approved.pdf.

[7] *Id.* at p. 194.

[8] *Id.*

[9] *See, e.g.,* Ministry of Environment and Tourism, National Policy on Climate Change for Namibia (2010) https://www.adaptation-undp.org/sites/default/files/downloads/namibia_nationalclimatechangepolicyfornamib.pdf.

the 1996 amendment to the Nature Conservation Ordinance of 1975, which have institutionalized the CBRNM policy by way of devolving rights to communities over natural resources such as wildlife, fauna and flora, and establishing rights for communities to set up tourism enterprises which affirm conservation and sustainable management.

A list of the project's benefits cannot substitute for an analysis of need and desirability that measures how the project conforms with applicable laws, policies, and land uses and considers the project's costs or negative impacts. This is especially true when a project is in an area that overlaps with a transnational conservation area, as well as community conservancies engaged within the government's CBNRM programmes.

By failing to conduct a need and desirability study considering these national interests, the EIA fails to meet the minimum requirements of the 2012 EIA Regulations.

II. The EIA is based on an inadequate baseline survey.

The baseline assessment was inadequate to understand the project's likely impacts.

An environmental assessment must contain "a description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity."[10]

The EIA took only four days to study an immense area containing a diverse range of endangered, threatened and vulnerable species. The EIA notes that it conducted a "rapid fieldwork assessment was conducted between 16 and 20 November 2020 to determine the actual faunal diversity" of an enormous range of fauna, including small mammals, larger mammals, reptiles and amphibians, birds, as well as trees, shrubs, and grasses.[11] In fact, the EIA acknowledges, for example, that "the lack of mammals observed during the fieldwork would mainly be ascribed to limited time on site; overcast and rainy weather conditions and overall area habituated with low to dense human presence."[12] Similarly, "[t]he lack of amphibians observed during the fieldwork would mainly be ascribed to limited time on site; first rains not yet having stimulated much amphibian activity and most of the Omuramba areas having been ploughed and cultivated."[13]

This baseline assessment was inadequate to understand where sensitive species' nests, burrows, foraging grounds, hunting grounds, or desire paths are located to avoid disturbing these species. As indicated below, several of these sensitive species experience high mortality rates due to impacts with vehicles and are easily disturbed by human incursions into their habitat, especially if these disturbances come close to nesting, foraging, or hunting areas.

[10] Section 15(2)(c), EIA Regulations, 2012.
[11] Peter L Cunningham, Environment and Wildlife Consulting Namibia, Vertebrate Fauna and Flora Associated with the PEL 73 Seismic Survey Area (Blocks 1819 & 1820), Kavango East Area [Baseline Study], p. 4 (November 2020).
[12] Final EIA at p. 116.
[13] *Id*. at p. 114.

Without a more accurate understanding of where endangered, threatened, and vulnerable animals are and a better understanding of their densities, the EIA's conclusions are unreliable.

The baseline assessment also failed to understand how the timing of the project may increase the significance of the project's impacts. The 2D survey will take place "in the month of April which is the dry season."[14] The EIA did not collect information on when and where sensitive species breed, or when they are particularly vulnerable due to seasonal changes in rain or heat and need to conserve energy, and when they are most likely to be migrating or moving near the survey lines. The baseline study did not then compare how these particularly sensitive times overlap with the proposed timeline for the survey. Without this information, the EIA has failed to identify whether the timing of the project could make identified impacts more significant.

Lastly, the EIA does not accurately reflect some of the conclusions in the baseline study. For example, the baseline study found that impacts from widening paths or creating new paths would be "High" before mitigation and "Medium to Low" after mitigation if personnel could be adequately supervised when widening these paths.[15] However, the EIA concludes that impacts from these activities would be "Improbable" with a "High" confidence,[16] despite the specialist explicitly noting that the probability of these effects occurring depends on how well personnel are trained and supervised. In other words, the effects are not "improbable" as the EIA claims, but could be likely in the event that something as common as human error should occur. Similar errors are made for other impact assessments. These contradictions must be resolved in order for the EIA to be consistent with the underlying expert report.

Without accurate baseline data, the EIA's conclusions are unreliable and cannot reasonably inform the decision maker in violation of the minimum requirements of the 2012 EIA Regulations.

III. The EIA failed to adequately study many impacts on wildlife and ignored other impacts entirely.

The EIA fails to study significant impacts on endangered, threatened, and vulnerable species, and these omissions have resulted in an EIA that has failed to study the likely impacts of the proposed project.

A. The EIA's study on endangered wild dogs is deficient and must be redone.

The "most important species expected to occur in the general area [of the seismic survey] would be the African wild dog (*Lycaon pictus*) and pangolin (*Smutsia (Manis) temminckii*)."[17]

[14] Final EIA at p. 10.
[15] Peter L Cunningham, Baseline Study at p. 61.
[16] Final EIA at p. 201
[17] Final EIA at p. 203.

The Wild Dog is endangered under Namibian law and is classified by the IUCN as endangered.[18] The EIA fails to study how wild dogs could be harmed by the project impacts in any detail.

An environmental assessment must contain an assessment of "each identified potentially significant effect," the nature, extent, duration, and probability of effects occurring and the ability that these effects could be reversed.[19]

Here, the EIA identified several potential impacts to wild dogs without studying those impacts. This is a clear violation of the EIA Regulations. Some of these impacts include the following:

- **Negative impacts from increased job seekers and human settlement**—The seismic survey has the potential to bring an "influx of opportunistic job seekers" and this could cause an "Increased risk of veld fires" as well as "Increased traffic, especially heavy vehicles."[20] The EIA entirely failed to study how this increased presence of human settlement may affect Wild Dogs, a serious omission given Wild Dogs sensitivity to human presence.
- **Habitat alteration**—"Habitat alteration and overutilization are the two primary processes threatening most mammals" in the survey area.[21] Although the EIA claims that the alteration to habitat would be minimal and the "actual footprint is small,"[22] even small alterations repeated over a large area within the wild dogs habitat could accumulate and have a significant impact. Some of this alteration would be permanent, as the "sites where expansion of the existing route(s) are envisaged would be permanently altered" in the survey area.[23] Failure to study how these small, permanent alterations to the habitat of an endangered animal can accumulate over a large area and impact the Wild Dog is a significant omission.
- **Vehicle strikes—** In addition to habitat disturbance or degradation, "Increased vehicle activities" could impact wildlife in the area by increasing noise and dust.[24] This increased risk of disturbance from vehicles can come from the on- and off-road vehicle activity involved in the 2D survey, including "4 by 4 vehicles [driven] either through the already existing gravel roads, sandy roads and tracks connecting small settlements."[25] Additionally, a high degree of African wild dog mortality is attributed to road mortality,[26]

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[18] *Id*.
[19] Section 15(2)(h), EIA Regulations, 2012.
[20] Final EIA at p. 210.
[21] *Id*. at p. 116.
[22] *Id*. at p. 200.
[23] Baseline Study at p. 59-60.
[24] Final EIA at p. 76.
[25] *Id*. at p. 10.
[26] Woodroffe, R., Davies-Mostert, H., Ginsberg, J., Graf, J., Leigh, K., McCreery, K., . . . Szykman, M. (2007). Rates and causes of mortality in Endangered African wild dogs Lycaon pictus: Lessons for management and monitoring. *Oryx, 41*(2), 215-223, https://www.cambridge.org/core/journals/oryx/article/rates-and-causes-of-mortality-in-endangered-african-wild-dogs-lycaon-pictus-lessons-for-management-and-monitoring/E7C8F3C6F42C81A8EAD121477237A56A.

but the EIA does not study this risk. For example, the EIA does not explain how much time that "4 by 4" vehicles or other survey vehicles are expected to spend, in total, in the wild dog habitat and the risk of collision or running over dens. Lastly, neither the baseline assessment nor the EIA appear to have identified the location of wild dog dens in the study area and the risk of these dens being impacted by the vehicles.

- **Energy lost from avoiding human presence—**Vehicle activity, vegetation clearing, survey activity, and the survey's personnel camps can affect wild dogs, as they alter their movements in the presence of human disturbance that can unfortunately lead to precious energy being wasted on avoiding human activity.[27] However, the EIA does not detail how many total nights the personnel camps or other survey activity will be in wild dog habitat and the degree to which these camps may affect the dogs or be situated close to hunting grounds, dens, or other sensitive locations. The loss of energy and time due to avoiding human presence is significant for this endangered species, as wild dogs have very high energetic and parental investment in offspring,[28] but no study was done on the expected energy expenditure of wild dogs to avoid increased human presence. Additionally, wild dogs try to avoid competition with lions,[29] and spend significant energy to avoid lions, but the EIA did not study how wild dogs may end up in more competition or proximity to lions as they try to avoid survey activity and increased human presence.[30]
- **Proximity to dens—**The proximity of the survey activity to den site can create particularly significant impacts, as den site selection is very important for the survival of groups of wild dogs,[31] but the sites of dens and likelihood of being affected was not assessed.
- **Ecological traps—**To the extent wild dogs may be attracted to the personnel camps or other human activities, the EIA did not study the degree to which the survey increases the risk of creating short- or long-term ecological traps from habituating wild dogs to human presence.[32]
- **Purpose of the project**—The purpose of this project is to explore for petroleum resources. The EIA fails to study how the purpose of this project conflicts with conservation efforts if it were to be successful.

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[27] Creel, S., Merkle, J., Mweetwa, T. *et al.* Hidden Markov Models reveal a clear human footprint on the movements of highly mobile African wild dogs. *Sci Rep* 10**,** 17908 (2020), https://www.nature.com/articles/s41598-020-74329-w#citeas.

[28] Esther van der Meer, Jealous Mpofu, Gregory S.A. Rasmussen, Hervé Fritz, Characteristics of African wild dog natal dens selected under different interspecific predation pressures, Mammalian Biology, Volume 78, Issue 5, 2013, Pages 336-343, https://www.sciencedirect.com/science/article/abs/pii/S1616504713000451.

[29] *Id*.

[30] Houston, A.I., Prosser, E. and Sans, E. (2012), The cost of disturbance: a waste of time and energy? Oikos, 121: 597-604. https://doi.org/10.1111/j.1600-0706.2011.19594.x.

[31] *Id*.

[32] Van der Meer, E., Rasmussen, G.S.A. and Fritz, H. (2015), Identifying ecological traps. Anim Conserv, 18: 359-366. https://doi.org/10.1111/acv.12182.

B. The EIA entirely failed to study how the socio-economic impacts of the project, including how attracting more people to the area in search of income, will increase the risk of trafficking pangolins.

The threat of illegal trafficking poses an additional risk to pangolins that was not adequately studied. As noted above, pangolins along with wild dogs are the two main mammals expected in the area of the survey.[33] The pangolin is regarded as the most trafficked mammal.[34] The IUCN categorizes the pangolin as vulnerable and in Namibia it is protected game.[35] Pangolins, also known as *smutsia temminckii*, are listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as a "species threatened with extinction which are or may be affected by trade."[36] Article II of CITES states that "[t]rade in specimens of [Appendix I] species must be subject to particularly strict regulation in order not to endanger further their survival."

An environmental assessment must contain an assessment of "each identified potentially significant effect," the nature, extent, duration, and probability of effects occurring and the ability that these effects could be reversed.[37] When a project increases populations of people in search of income and other socio-economic ills that could potentially increase the amount of trafficking of a vulnerable animal, this effect should be taken into account.

Here, the EIA has failed to study significant potential impacts on this vulnerable animal in the following ways:

- **More unemployed individuals in search of income and greater population density increases the risk of trafficking**—The EIA recognizes a primary threat to pangolins is from illegal poaching and wildlife trafficking.[38] The EIA believes that the project will not increase the risk of trafficking because no new roads will be created.[39] However, the seismic survey is likely to result in an "In-flux of workers employed by contractors as well as a potential influx of job seekers, resulting in potential increase settlements," the "influx of opportunistic job seekers may result in increased numbers of opportunistic criminals taking advantage of high unemployment," increasing the amount of "unsuccessful job seeker[s] needing to find alternative source of income."[40] All of these socio-economic effects could have a disastrous effect on pangolins by increasing the

[33] Final EIA at p. 203.
[34] Aisher, A. (2016). Scarcity, Alterity and Value: Decline of the Pangolin, the World's Most Trafficked Mammal. *Conservation and Society, 14*(4), 317-329. Retrieved April 7, 2021, from http://www.jstor.org/stable/26393255.
[35] Baseline Study at p. 18.
[36] *Id.*
[37] Section 15(2)(h), EIA Regulations, 2012.
[38] Final EIA at p. 211.
[39] *Id*.
[40] Final EIA at p. 210.

presence of unemployed people in search of income within pangolin habitat and also increasing the risk of trafficking these vulnerable animals.

- **Vehicle strikes -** Pangolins are vulnerable to traffic collisions on roads, and would be at risk from not only the trucks conducting the survey, but the additional traffic generated by those attracted to the region by the possibility of new economic opportunity.[41]
- **Proximity to dens –** Pangolins burrow into the ground and these burrows are extremely important "because a suitable burrow could satisfy pangolin's requirements for food sources, concealment and temperature."[42] The EIA fails to assess how the added human presence in the form of the surveying truck, seismic waves, and the activities of new migrants to the region – including additional agricultural – would affect the availability of suitable burrow sites and habitat for the pangolins.[43]
- **Habitat alteration –** The EIA also fails to consider how the presence of these additional people, many of whom will engage in subsistence agriculture directly, or spur the growth of agricultural development, will diminish pangolin habitat.[44]
- **Additional vulnerability to hunting for bushmeat –** Hunting for bushmeat is another serious threat to *Smutsia temminckii* in the region that the EIA also fails to consider.[45] With additional people traveling through typically very low-traffic areas, particularly migrants to the region with few other immediate food sources, there is a high likelihood that pangolin hunting for bushmeat would increase with these projects.
- **Impacts on local people's livelihoods.** The EIA notes that "[t]he livelihoods of ordinary local people within KAZA TFCA inclusive of the proposed project areas highly dependent on seasonal subsistence agriculture, animal husbandry, fishing, natural resource harvesting, tourism, trading, and hunting." EIA at 199. There is no discussion of potential impacts on the ability of local communities to continue these activities while oil and gas exploration is ongoing.

C. The EIA ignored key impacts to elephants other than how the seismic survey might affect elephants' communication, and even this analysis was flawed.

[41] Darren W. Pietersen et al., *Chapter 11 - Temminck's pangolin Smutsia temminckii (Smuts, 1832)*, *in* PANGOLINS 175–193 (Daniel W. S. Challender, Helen C. Nash, & Carly Waterman eds., 2020), p. 190, https://www.sciencedirect.com/science/article/pii/B9780128155073000113.

[42] Hua, L., Gong, S., Wang, F., Li, W., Ge, Y., Li, X., & Hou, F. (2015). Captive breeding of pangolins: current status, problems and future prospects. *ZooKeys*, (507), 99–114. https://doi.org/10.3897/zookeys.507.6970.

[43] Darren W. Pietersen et al., supra at n. 41.

[44] *Id*.

[45] Durojaye Soewu et al., *Chapter 15 - Bushmeat and beyond: historic and contemporary use in Africa*, *in* PANGOLINS 241–258 (Daniel W. S. Challender, Helen C. Nash, & Carly Waterman eds., 2020), p. 242 https://www.sciencedirect.com/science/article/pii/B9780128155073000150.

Elephants in the area include the Africa Savannah Elephant, an endangered[46] and specially protected game.[47] The EIA notes that there are "occasional elephant movements" south of the survey area between the "Kaudum and Mangetti National Parks and Kaudum and Bwabwata National Parks."[48]

An environmental assessment is not sufficient if it studies only one identified impact on a species. To the contrary, an environmental assessment must contain "a description of all environmental issues that were identified during the assessment process, an assessment of the significance of each issue" and "assessment of each identified potentially significant effect."[49]

Here, the EIA looked at the impacts to elephants from 300 Hz frequencies generated by the seismic surveys while ignoring all other significant impacts from its elephant analysis, as shown below:

- **Population and behavioral characteristics:** The EIA fails to analyze the density, population dynamics, seasonal activities, and migratory behavior of elephants in PEL 73.
- **Noise:** The EIA asserts that "Elephant[s] are known to use infrasound communication with frequencies from 14-35 Hz for long distance communication with the best period for such communication just after sunset when night-time cooling enhances low-frequency sounds and thus maximises communication ranges."[50] The EIA asserts the project will not impact elephants for four reasons: (1) the "typical weight drop would have…an impulse frequency of 300HZ" that is "above the range elephants use for communication"; (2) this frequency will "be of short duration"; (3) the surveys will "be conducted during daylight hours"; and (4) "elephants are not sedentary in the proposed development."[51] This analysis is flawed for several reasons.
    - First, the EIA fails to recognize elephant "low-frequency calls in the range of 0 to 700 Hz" have been measured in Etosha National Park, Namibia.[52] Thus, it is not necessarily true that the 300 Hz weight-drop will fall outside of the range of frequencies used by elephants. The seismic waves from the weight-drop may interfere with communication among breeding herds of elephants in Khaudam

[46]IUCN, African elephant species now Endangered and Critically Endangered - IUCN Red List (25 Mar. 2021), https://www.iucn.org/news/species/202103/african-elephant-species-now-endangered-and-critically-endangered-iucn-red-list.
[47] Baseline Study at p. 17.
[48] Final EIA at p. 204.
[49] Section 15(2)(g)-(h).
[50] Final EIA at p. 203.
[51] *Id*.
[52]Michael Garstang, David R. Fitzjarrald, Kurt Fristrup, and Conrad Brain, The Daily Cycle of Low-Frequency Elephant Calls and Near-Surface Atmospheric Conditions, Earth Interactions (2005) https://journals.ametsoc.org/view/journals/eint/9/14/ei147.1.xml.

National Park and George Mukoya Community Conservation Area, the boundaries to which the proposed seismic lines will extend.[53]

- Second, the EIA only looked at the typical "peak force" output of the weight drop, and did not examine whether the survey might involve weight drops at less than peak force that might produce different wave lengths.
- Third, the EIA acknowledges that "elephant[s] also use seismic communication – i.e. ground borne stimuli" such as stomping "to avoid or threaten predators, assess and navigate within the environment, and communicate."[54] The EIA fails to acknowledge how the weight drop for the seismic survey might affect this kind of ground borne seismic communication.
- Third, although the 300 Hz frequency will be of "short duration", there will be repeated weight drops occurring over large areas where elephants may move, and the EIA fails to study how these accumulated blasts of sound will affect elephants.
- Fourth, the fact that surveys will be conducted in daylight could result in more harm, not less, as the EIA fails to disclose what frequency elephants communicate at during the daylight hours which may be higher than the lower frequencies that are optimal for the cooler night air.
- Lastly, the fact that elephants are not sedentary could result in more harm, not less, as the elephants could move through the area and encounter the survey equipment repeatedly.

- **Personnel camps and 4 by 4 vehicles:** The EIA focuses its attention on the effects from the weight drop. This ignores plenty of other potential impacts, including noise and disturbances generated from personnel camps, generators, "4 by 4" vehicles, and the placement of the geophones on the grounds where elephants may tread. There is no discussion as to the effect of habitat avoidance or the way in which predators may be displaced from the survey area into habitats with higher elephant density.
- **Increased human presence and trafficking:** For all the same reasons that increased human density could affect wild dogs and pangolins, increased human density could also affect elephants, especially those species at risk of trafficking for their tusks. The EIA entirely failed to study this risk to elephants.

D. The EIA violates the 2012 EIA regulations by failing to study the impacts of creating wider and new vehicle tracks and clearing survey lines in the habitat of species that are sensitive to poaching and human interference.

Both the EIA and EMP acknowledge that the project may create wider vehicle access tracks off the main roads and, despite some assurances to the contrary, the EIA and EMP acknowledge

[53] *See,* Jan Akert, Comments and Objections To Risk Based Solutions EIA and EMP Report For 2d Seismic Survey In Pel 73 By Reconafrica. Kavango, Namibia, ¶ 4.6 (April 2021).
[54] Final EIA at p. 203.

the project may even create new tracks. The EIA recognizes that these wider and new tracks could have significant impacts on wildlife sensitive to poachers or human interference, and yet the EIA entirely fails to study these significant impacts.

As environmental assessment must examine "each **potentially** significant effect."[55] (emphasis added). Thus, even where the widening of some tracks has only the potential to have a significant effect, it must be examined. And, as the EIA recognizes, widening tracks could have very significant effects by improving tracks so that poachers and illegal harvesters can more easily use these tracks and so that humans more easily and quickly intrude upon sensitive species' habitats.

Here, track widening potentially will have a significant effect for almost every single measurement in the EIA, including disruption of habitats, impacts on reptiles, amphibians, mammals, avians, trees and shrubs, grasses, and ecosystem functions.[56] Despite being connected to all of these potential effects, the EIA declined to study this effect of track widening because "Only minimum widening of the tracks may be necessary in some places in order for the survey trucks to pass easily."[57] The EIA tries to diminish how often tracks will be widened by noting that "very few areas along the survey lines will require the widening of the existing sandy access resulting in cutting of the local bushes,"[58] but even a few areas of bush cutting per square kilometer in a project of a large size could add up quickly.

There is no doubt that some track widening will occur. The EIA acknowledges that the survey project will involve "widening of tracks and creation of limited new access as may be applicable."[59] The project will create "temporary job opportunities [that] will only be available for the debushing / widening of some tracks."[60] The EIA also acknowledges that "if requested by the local community / stakeholders to clear and widen any given track that will be used for the proposed 2D seismic survey operations, this will be undertaken."[61] In addition to vehicle tracks, the EIA anticipates the need to clear vegetation for creating survey lines.[62] Where this track widening has the potential to add up to a significant amount of vegetation clearing over a large area, it should have been studied.

In addition to widening access tracks, there may be effects from creating new tracks. The EIA states that "no new tracks/roads are envisaged as the seismic surveying will be conducted on existing access routes."[63] However, this assertion is contradicted by both the EIA and EMP that clearly indicate that new tracks are possible. For example, the EMP states that "Where tracks

[55] Section 15(2)(h), EIA Regulations, 2012.
[56] Final EIA at p. 200-220.
[57] *Id.* at p. 205.
[58] *Id.* at p. 10.
[59] *Id.* at p. 224.
[60] *Id*. at p. 210.
[61] *Id.* at p. 76.
[62] *Id*. at p. 76.
[63] *Id.* at p. 211.

have to be made to potential exploration sites off the main routes, the routes should be selected causing minimal damage to the environment- e.g. use the same tracks[,] cross drainage lines at right angles[,] avoid placing tracks within drainage lines[,] avoid collateral damage (i.e. select routes that do not require the unnecessary removal of trees/shrubs, especially protected species)."[64] Indeed, every mitigation measure in the EMP is evaluated against a schedule where Reconnaissance Energy Namibia expects to conduct a "process of widening of tracks and creation of limited new access as may be applicable."[65] The mitigation measures anticipate the creation of new tracks, as the EMP states that the applicant will "rehabilitate all new tracks created."[66] And, as noted above, the EIA explicitly acknowledges that the project will involve the "creation of limited new access as may be applicable."[67] Thus, the project clearly anticipates creating new tracks despite misleadingly stating the contrary in the EIA and fails to study the effects from creating new tracks.

The failure to study the effects of wider and new access tracks despite the acknowledgement that wider and new tracks are likely to be created is a serious omission. The EIA recognizes that "Creating new tracks in pristine areas would result in the destruction of numerous protected tree species as well as result in access to these areas leading to further settlements as well as illegal harvesting and poaching and overall environmental destruction."[68] Although the baseline study for the EIA recognized that the intensity of permanent damage to habitat "would depend on control over the contractors during the road building/expansion phase(s), but should be limited to localized implications,"[69] the EIA failed to study those "localized implications." These impacts are likely to be ongoing and of a long duration because the EMP does not plan to undo the new tracks but simply "rehabilitate all new tracks created."[70]

Lastly, the remediation plan does not study how vegetation that has already been cut-back or how new tracks that have been created will be remediated so that the tracks are no longer easily used by poachers or illegal harvesters. Nor does this remediation plan explain how cut-back vegetation and cleared land will be remediated so that it no longer disrupts habitat.

Almost every significant impact determination in the EIA hinges on the fact that tracks will not be widened,[71] and yet the EIA and EMP acknowledge that this is possible. By failing to study a key environmental impact on the habitat of endangered animals and those threatened by

[64] Reconnaissance Energy Namibia (Pty) Ltd, Final Environmental Management Plan (EMP) Report to Support the Application for Environmental Clearance Certificate (ECC) for the Proposed 2D Sesimic Survey covering the Area of Interest (AOI) in the Petroleum Exploration License (PEL) No. 73, Kavango Sedimentary Basin, Kavango West and East Regions, Northern Namibia, p. 54 (March 2021).
[65] *See, e.g., id.* at p. 54.
[66] *Id.* at p. 52.
[67] Final EIA at p. 224.
[68] *Id.* at p. 211.
[69] Peter L Cunningham, Baseline Study at p. 59.
[70] EMP at p. 52.
[71] Final EIA at p. 198-222.

poaching, the EIA has failed to provide the necessary information required by the 2012 EIA Regulations and is insufficient as a matter of law.

E. The EIA fails to study behavioral disturbances in animals whose sensitive habitat encompasses a large portion of the overall survey area in which the survey activities, over many days, could accumulate into a significant impact.

A significant flaw of the EIA is that it assumes there will be low impacts due to the fact that survey activity will not stay in one place for very long. [72]

As noted above, an environmental assessment must study the "extent and duration of the effects."[73] By ignoring how survey activities can accumulate impacts over time despite not staying in one place for long, the environmental assessment has failed to study the extent and duration of the projects' effects.

In this case, a seismic survey can last up to 28 days at a time[74] and survey lines can span 450 kilometers.[75] Seismic surveys may disturb wildlife because they are perceived as dangerous (noise, smell, light as well as the physical appearance of novel objects), in a similar way as predators.[76] Disturbances include displacement (scaring away) and behavioral changes and effects vary from negligible to permanent displacement or population decline.[77] The more disturbances, the less time to forage and eventually to withstand periods with food shortage or with high energy demand such as the long movements for migrating birds.[78] Persistent disturbance may lead to animals being displaced from important areas for feeding, mating, calf rearing etc. which again may result in a population decline. Less pervasive disturbance may affect individual food intake, and thus lead to reduced fecundity.[79] In addition, sensitivity to disturbance is often high and effects amplified when animals have offspring needing parental care.[80]

F. Insufficient analysis on impacts from the weight drops and other survey activity on nesting or burrowing animals.

The EIA did not look at how the weight drop might affect other species who nest and live in the ground, such as pangolins that dig deep burrows for sleeping and nesting and jackals. The EIA looked only at how the weight drop will create sound frequencies that will not disrupt elephants. The EIA failed to look at any other effects from the weight drop on the various

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[72] *Id*. at p. 217 ("The length of time the seismic crew will spend in any one location is short, with up to 10 km per day of acquisition possible in good weather conditions.")
[73] Section 15(2)(h)(cc), EIA Regulations, 2012.
[74] Final EIA at p. 60.
[75] *Id*. at p. 58.
[76] Aarhus University, Onshore Seismic Surveys In Greenland, p. 20 (2020) https://dce2.au.dk/pub/TR161.pdf.
[77] *Id*.
[78] *Id*.
[79] *Id*.
[80] *Id*.

endangered and threatened or vulnerable species in the area. Effects on the weight drop and the weight drop truck need to be better understood and mitigated to ensure the weight drops do not occur in close proximity to animals nesting on or beneath the ground.

It is also not clear that the baseline study accurately categorized the animals that den in the area. For example, black backed jackals, which den on the ground, are listed as a "Secure; Problem Animal" in the baseline study, but are categorized as an IUCN red list threatened animal.[81] The EIA should be reviewed by an expert to ensure species have been properly categorized and studied, especially for how species that den or burrow in the ground may be impacted by the weight drops and survey activity.

G. Habitat fragmentation and disruption and resulting changes in inter- and intra-species competition.

The project has failed to study how creating the survey lines and laying the geophones can fragment habitat, even if temporarily, and change species competition and ecosystem balance. When workers create seismic lines, roads and other clearings this leaves breaks or separations in ecosystems.[82] Seismic activity itself may generally affect the size of wildlife populations, the location of herds, and their traditional migratory paths.[83] Habitat fragmentation from increased vehicular activity during the survey or from the increased human presence drawn to the area as discussed in the socio-economic section were not assessed.

IV. Impacts on migratory species have not been adequately considered.

Although the EIA acknowledges that many of the species found in the general area of PEL 73 are migratory, the study explicitly notes that it does not assess impacts to them.

"An assessment report must contain all information that is necessary for the Environmental Commissioner to consider and to make a decision on the application, and must include - an assessment of **each identified potentially significant effect**, including (aa) cumulative effects; (bb) the nature of the effects; (cc) the extent and duration of the effects; (dd) the probability of the effects occurring; (ee) the degree to which the effects can be reversed; (ff) the degree to which the effects may cause irreplaceable loss of resources; and (gg) the degree to which the effects can be mitigated."[84]

The EIA excludes all "aquatic, extralimital breeders and migrant species."[85] However, the EIA recognizes that "[m]any species expected to occur in the general area are migratory – e.g.

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[81] Hoffmann, M., *Canis mesomelas*. *The IUCN Red List of Threatened Species* (2014) https://dx.doi.org/10.2305/IUCN.UK.2014-1.RLTS.T3755A46122476.en.

[82] Pembina Institute, Seismic Energy https://www.pembina.org/reports/energy-environment-north-2004-seismic.pdf.

[83] *Id*.

[84] Section 15(2)(h), EIA Regulations, 2012. (emphasis added).

[85] Final EIA at p. 118.

bustards and korhaan – and not found permanently in the area. Other species may frequent the area only if water collects in the Omuramba Omatako or whilst moving between wetlands in Etosha and Bushman land – e.g. cranes, ducks, flamingos, etc."[86] Migrating animals depend heavily on habitats where they can rest undisturbed. The EIA completely fails to study how the 2D surveys will impact these migrating animals.

There are special considerations for migratory species that should be given more analysis in this EIA.

V. Inadequate mitigation measures

There are several problems with the mitigation measures in this project.

A. Buffer zones between project activity and sensitive species habitat are missing entirely

In the United States, survey projects typically require adequate buffer zones between any project activity and the nests, feeding grounds, or other habitats of sensitive species. *See, e.g., Nat. Res. Def. Council v. Nat'l Park Serv*., 250 F. Supp. 3d 1260, 1302 (M.D. Fla. 2017) (noting that the US Fish and Wildlife Service has studied the need for buffers in survey designs of many types and has, for example, required a 200–foot buffer for foot or off road traffic around red-cockaded woodpecker clusters, a buffer of 328–656 feet around Florida panther den sites, and avoidance of roost sites for other animals entirely). No such mitigation measures were studied or exist here.

B. Meeting with park officials, without any reporting requirements on the content of those meetings or commitments to abide by their recommendations, will not mitigate effects on national parks.

The borders of PEL 73 are adjacent to Mangetti National Park and Khaudam National Park. The EMP notes that "the key central exploration interests within PEL 73 are . . . more than 40 km from the boundary of the Khaudam National Park and more than 70 km from the Mangetti National Park."[87] However, the mitigation measures recognize that the distances to these parks are relatively close. For example, in order to "prevent flora and ecosystem destruction and promote conservation," the EMP suggests meeting with "MET officials whilst working close to the Mangetti and Khaudum NP's."[88] There is no explanation for how meetings with MET officials will protect the parks when there are no reporting requirements for what takes place during those meetings nor any commitments to abide by park officials' recommendations. Lastly, the purpose of this project is to explore for hydrocarbons that could radically alter the landscape near these national parks. The EIA should have studied whether the survey to lay the groundwork for this

[86] *Id*. at p. 118.
[87] EMP at p. 5.
[88] EMP at p. 55.

potential radical shift should proceed without an analysis of whether the purpose of this project can be reconciled with the interests of these national parks.

VI. The EIA fails to study how the project will impede Namibia's ability to mitigate and adapt to climate change.

Mitigation and adaptation are harder in a deteriorated environment, and this project will make adapting to climate only harder, rendering this project neither necessary nor desirable.

The Minister of Environment and Tourism's 2010 National Policy on Climate Change is "a legal framework that will address the impacts of climate change, vulnerable populations and Namibia's adaptive capacity."[89] The National Policy on Climate Change states that its strategies and actions to lower Namibia's vulnerability to climate change "should be regarded as fundamental 'must do' actions and/ or approaches for successful development and implementation of a climate change policy."[90] A key strategy in the National Policy on Climate Change is that "due consideration of impacts of climate change should be made for all development" and "this should inform and influence the designs of infrastructure, location of such development etc."[91] In its most recent biennial update to the United Nations Framework Convention on Climate Change, Namibia stated that the "country is highly committed to implement the Convention to play its role as a signatory Party, by contributing in the international effort to curb down emissions and increase sinks of GHGs while investing in adaptation to climate change impacts."[92]

The EIA fails to study how the project will negatively affect Namibia's ability to adapt to and mitigate climate change. Although the EIA studies the "releases of localized and site-specific emissions" from "survey equipment, vehicles and generators [that] will emit greenhouse gases and various air contaminants,"[93] the EIA fails to study how the increased human presence, wider or new vehicular tracks, disturbed habitat, altered animal behavior, and potential destruction of some species' burrows or nests, among the many other impacts of the project, will make it more difficult for wildlife, ecosystems, and people to adapt to climate change.

XI. Incremental approach to decision making fails to consider the principle of intergenerational equity and provide for a proper assessment of impacts

Assessing impacts in a piecemeal fashion is not protective of constitutional rights and the principle of intergenerational equity.

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[89] Ministry of Environment and Tourism, National Policy on Climate Change for Namibia, p. 13 (2010) https://www.adaptation-undp.org/sites/default/files/downloads/namibia_nationalclimatechangepolicyfornamib.pdf.
[90] *Id.* at p. 7.
[91] *Id.* at p. 26.
[92] Republic of Namibia, Fourth Biennial Update Report (BUR4) to the United Nations Framework Convention on Climate Change, p. 16 (February 2021) https://unfccc.int/sites/default/files/resource/Namibia-BUR4-FINAL.pdf.
[93] Final EIA at p. 221.

The Constitution,[94] together with the EIA regulations,[95] requires that EIAs include, amongst other things, an assessment of the nature, extent, duration and significance of the consequences for or the impacts on the environment of that activity, including the cumulative impacts. An "assessment report must contain all information that is necessary for the Environmental Commissioner to consider and to make a decision on the application." Information that is 'necessary' includes information that is reasonably foreseeable. The EIA regulations define "cumulative effect" as "the effect of an activity that in itself may not be significant but may become significant when added to the existing and potential effects eventuating from similar or diverse activities or undertakings in the area."[96] The EIA itself notes that "[c]umulative impacts are those impacts which result from the incremental impact of the proposed activities (2D seismic survey operations) when added to other past, present, and reasonably near future activities."[97] Information on how a project will affect Namibia's ability to mitigate and adapt to climate change, especially when this information is reasonably foreseeable and obtainable, should be considered in an EIA. By limiting the scope of the EIA to seismic surveys and not the foreseeable consequences of those surveys, the EIA has failed to provide "all information that is necessary for relevant authority to make a decision".

The scope of the assessment in this EIA report, is narrow in that it deprives stakeholders, I&APs and decision-makers from understanding the full dimensions of the proposed activities, including further exploration phases and commercial production activities as reasonably foreseeable future actions intended by Recon Africa. The proposed exploration activities are an intended precursor to another, more direct and extensive polluting activity.

Whilst it is accepted that exploration and production activities are separately listed in the listing notices, and that a new and separate application for environmental authorisation will be required for any further exploration activities or production development arising in the future, the proposed exploration activities cannot be viewed in isolation from further phases of exploration, or from production activities, and the impacts associated therewith.

It is submitted that the impacts and risks of other exploration phases (at the very least) and production activities should be assessed and considered to a reasonable extent in the current application, because if they are found to be unacceptable, which we submit is likely, then the proposed activities are unnecessary and completely avoidable.

In respect of fossil fuels explorations, these cumulative effects must be considered in a wide sense, since ecological threats are rising rapidly beyond the early phase exploration activities

[94] Article 95 of the Namibian Constitution which asserts " the state shall actively promote and maintain the welfare of the people by adopting policies which include the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians"

[95] Section 15(2)(h), EIA Regulations, 2012.

[96] Section 1, EIA Regulations, 2012 (definitions).

[97] Final EIA at p. 222.

proposed in this application. Impacts related to other exploration activities are reasonably foreseeable impacts eventuating from a similar or diverse activity, and therefore should have been considered in the EIAR. In taking such a narrow approach to this assessment, the EAP and Applicant have excluded many relevant factors from the scope of the assessment. This includes potential future impacts associated with drilling wells, such as the generation and disposal of produced water, impacts associated with gas infrastructure, climate impacts of indirect CO2 emissions from the combustion of oil and gas that would be recovered.

Without a more detailed assessment to inform a decision to authorise exploration activities, the decision-maker is not in a position to consider all relevant factors, as required by section 15(2) of the EIA regulations (2012) as well as section 33(2) of the Environmental Management Act. Accordingly, a decision to authorise the proposed exploration activities is irrational.

Intergenerational equity is a critical component of sustainable development. The failure of policy and decision-makers both locally and internationally to take the long-term impacts of human activities into account has contributed to many current environmental problems; including climate change, and the depletion and extinction of biological resources. If the intergenerational equity requirement is not considered in these situations, and an approach of considering existing factors only is followed, it is difficult to prevent cumulative environmental degradation where specific developments, considered in isolation of future needs, do not present an undue environmental risk.

Given the above, the lack of consideration of the intergenerational equity of the interests of future generations places the environment and the people who rely on it in a precarious position, one in which incremental decision making moves the environment and the wellbeing of people and communities closer to environmental destruction and loss of natural areas or open spaces. This is contrary to the principle of intergenerational equity outlined in art 95 of the Constitution as well as the principles of environmental management outlined in s 3(2)(a-l) of the Environmental Management Act, 2007 and as a result renders this assessment fundamentally flawed.

VII. The failure to discuss potential environmental, health, and socio-economic harms during public consultations denied local and indigenous people the opportunity to provide free, prior, and informed consent.

Reconnaissance Energy failed to obtain the free, prior and informed consent of indigenous people that would be necessary prior to the government approving an environmental clearance certificate. The obligation for the state to obtain free, prior and informed consent comes from various human rights treaties discussed below that Namibia has ratified. Although Reconnaissance Energy conducted public consultations, informed consent was not possible when the topics of discussion included the socio-economic benefits of the project but not the socio-economic, environmental, health, or cultural harms to local or indigenous people.

1. Namibia has an obligation under various human rights treaties to obtain the free, prior and informed consent of indigenous people when an action may affect their rights.

Namibia adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) on September 13, 2007. [98] UNDRIP is a "comprehensive statement addressing the human rights of indigenous peoples." [99] UNDRIP is "widely viewed as not creating new rights"[100] and instead articulates how "human rights enshrined in other international human rights instruments…apply to indigenous peoples."[101] Central to UNDRIP is its declaration that States shall obtain "free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources."[102]

Although UNDRIP's principles are not binding on the state, Namibia is a signatory to several other binding international agreements that affirm the norms represented in UNDRIP, such as the African Charter on Human and People's Rights (the African Charter), the Convention on the Rights of the Child (CRC), the International Convention on the Elimination of all forms of racial discrimination (ICERD) and the International Covenant on Civil and Political Rights (ICCPR).

The African Charter, ratified by Namibia in 1981,[103] provides for the right to health and a satisfactory environment and the right to freely dispose of one's wealth and resources.[104] The African Commission on Human Rights has interpreted these rights to require the government to provide free, prior and informed consent when government actions could infringe upon these rights. For example, in *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria,* the Ogoni people brought a complaint before the African Commission on Human Rights against the Nigerian government for failing to consult them regarding oil development and for failing to protect them from the environmental and health hazards when an oil spill occurred.[105] The African Commission recognized that "Government compliance with the spirit of Articles 16 and 24 of the African Charter [that provide for the right to health and a satisfactory environment] must also include" the following:

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[98] UN General Assembly, *United Nations Declaration on the Rights of Indigenous Peoples: resolution / adopted by the General Assembly*, 2 October 2007, A/RES/61/295 (UNDRIP), https://www.refworld.org/docid/471355a82.html.

[99] United Nations, "Frequently Asked Questions," Declaration on the Rights of Indigenous Peoples https://www.un.org/esa/socdev/unpfii/documents/faq_drips_en.pdf.

[100] *Id*.

[101] United Nations, "Frequently Asked Questions," supra n. 101.

[102] Article 32, UNDRIP.

[103] Organization of African Unity. (1981). African (Banjul) Charter on Human and People's Rights https://au.int/en/treaties (adopted by Namibia in 1981, entered into force in 1986).

[104] Articles 24, 21, African Charter on Human and People's Rights.

[105] *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, Communication, Case 155/96, Afr. Comm'n on Human and Peoples' Rights, ACHPR/RPT.15, ¶ 53 (2001-02) https://www.escr-net.org/sites/default/files/serac.pdf.

> publicising environmental and social impact studies prior to any major industrial development, undertaking appropriate monitoring and providing information to those communities exposed to hazardous materials and activities and providing **meaningful opportunities** for individuals to be heard and to participate in the development decisions affecting their communities.[106]

Additionally, when "the government did not involve the Ogoni Communities in the decisions that affected the development of Ogoniland", the government's actions "may well be said to constitute a violation of Article 21" [107] of the African Charter that provides for the right of peoples to dispose of their wealth and natural resources.

United Nations human rights bodies have also addressed Namibia's obligation to obtain free, prior and informed consent from its indigenous people.[108] In its concluding observations on Namibia's initial report from 2016, the Committee on Economic, Social and Cultural Rights expressed its concern that "indigenous peoples' traditional uses and occupation of land are not recognized and protected."[109] The Committee recommended that Namibia "[e]nsure the respect of the principle of obtaining free, prior and informed consent in development projects, such as the construction of a dam in the Baynes Mountains."[110]

Similarly, the Human Rights Committee expressed concern that "indigenous groups are insufficiently consulted regarding the extraction of natural resources on their traditional lands."[111] The Committee stated that Namibia "should seek the free and informed consent of indigenous communities and give primary consideration to their opinions and decisions prior to granting licences to extractive industries."[112]

Lastly, it is imperative that informed consent be obtained early in the planning stage of extractive industries, even if indigenous people do not own a legal entitlement to the resources or land. The "duty to consult with them arises whenever their particular interests are at stake, even when those interests do not correspond to a recognized right to land or other legal entitlement."[113] To be effective, the Special Rapporteur on the rights of indigenous peoples,

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[106] *Id*.
[107] *Id*. at ¶ 55.
[108] States are required to "Ensure that members of indigenous peoples have equal rights in respect of effective participation in public life and that no decisions directly relating to their rights and interests are taken without their informed consent." General recommendation No. 23 on Indigenous Peoples, art. 4, para. (d). (1997) (CERD/C/51/Misc.13/Rev.4).
[109] Committee on Economic, Social and Cultural Rights, Concluding observations on the initial report of Namibia, E/C.12/NAM/CO/1, ¶ 15 (23 March 2016) https://undocs.org/en/E/C.12/NAM/CO/1.
[110] *Id*. at ¶ 16(b).
[111] Human Rights Committee, Concluding observations on the second report of Namibia, CCPR/C/NAM/CO/2, ¶ 43 (22 April 2016) https://undocs.org/en/CCPR/C/NAM/CO/2.
[112] *Id*. at ¶ 44.
[113] Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people, James Anaya, Promotion and Protection of All Human Rights, Civil, Political, Economic, Social And Cultural Rights, Including The Right To Development, A/HRC/12/34, p. 15 (15 July 2009).

James Anaya, has found that consultation should take place prior to actions that "set in motion decisions that prejudice indigenous peoples' ability to set their own priorities for the development of their lands and territories. "[114]

2. Reconnaissance Energy Namibia did not afford a meaningful opportunity for people to be heard and participate in decisions or provide informed consent when the socio-economic, environmental, and health harms of the project were not discussed.

Informed consent requires an understanding of both the positive and negative aspects of a project. During public consultations for the 2D survey that occurred from January through March, 2021, socio-economic benefits were discussed such as "employment and recruitment process" and "training" and other "socio-economic benefits from 2D seismic and stratigraphic well drilling."[115] Glaringly missing from the topics of discussions was any discussion of the socio-economic, environmental, or health harms from the project. Topics of discussion also did not include the cultural or other interests of indigenous people. Lastly, the consultations did not discuss how the purpose of the project, which is to discover hydrocarbons to potentially begin producing oil and gas, could radically alter their landscape and way of life. Without disclosing how this project can open the door to different land uses—changing agricultural lands to an oil and gas field that will potentially displace local people or cause them harm—the project did not obtain free, prior and informed consent.

3. The EIA did not study the effects of the project could impact local and indigenous people's human rights.

The Human Rights elements contained within Articles 5, 6, 7 and 8 of the Namibian Constitution, as well as the principles of environmental management outlined in s 3(2) of the Environmental Management Act[116], were not considered within the EIA and EMP report. For example, the EIA does not assess how the project would affect indigenous groups' or their socio-economic, environmental, health, or cultural interests. The EIA states that the "majority of the indigenous Namibians [are] swimming in inherited generation poverty."[117] However, the EIA does not list the indigenous groups in the area that may be affected by the project. Nor does the EIA list what indigenous groups' concerns are. The EIA fails to study how any of the environmental, socio-economic, cultural or archaeological impacts could impact indigenous and local communities' rights to protection of life, protection of liberty and respect for human dignity.[118] A lack of the appreciation of these fundamental components of human rights within this environmental assessment process, lies counter to Namibia's obligations as outlined in its

[114] Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya, Extractive industries and indigenous peoples, A/HRC/24/41, p. 14 (July 2013).
[115] Final EIA at p. 213.
[116] Section 3(2)(c); 3(2)(g); 3(2)(h), Environmental Management Act.
[117] Final EIA at p. 191.
[118] Final EIA at pages 209-210.

own constitution and its regional and international obligations thereby rendering this particular application legally flawed.

VIII. The EIA failed to conduct studies required by other international obligations

Namibia is a party to treaties that require protection of biological diversity and world heritage. The EIA's failure to assess whether the project complies with the requirements of these conventions is a glaring omission.

Under Article 144 of the Namibian Constitution, "[a]ll ratified treaties and protocols are enforceable within Namibia by the Namibian courts."[119] The EIA lists the Convention on Biological Diversity and the World Heritage Convention among the international authorities applicable to the 2D seismic survey project.[120]

The EIA failed to assess whether the proposed project complies with the Convention on Biological Diversity. The Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA) spans across Botswana, Namibia, Angola, Zambia, and Zimbabwe. Under the Convention on Biological Diversity, States have an obligation to "ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."[121] The EIA failed to assess how the project would affect the environment of other states neighbouring Namibia.

The EIA also failed to assess impacts under the World Heritage Convention**.** The Okavango Delta is a UNESCO site. In a meeting with the World Heritage Center about oil and gas exploration by Reconnaissance Africa, Namibia's permanent delegate to UNESCO reiterated Namibia's "commitment to the Convention Concerning the Protection of the World Cultural and Natural Heritage" and its "guarantee not to undertake any deliberate measures that might directly or indirectly impact negatively the Outstanding Universal Value (OUV) of any World Heritage properties."[122] Moving ahead with the 2D seismic survey without ample assessment of its environmental impacts as described in previous sections is inconsistent with Namibia's guarantee to the World Heritage Center.

[119] *Id*. at p. 77-78.
[120] *Id*. at 77.
[121] Article 3, The Convention on Biological Diversity of 5 June 1992 (1760 U.N.T.S. 69).
[122] UNESCO, UNESCO vigilant on potential impacts of oil exploration in Namibia and Botswana on World Heritage properties (2020) https://whc.unesco.org/en/news/2230/.