IN THE HIGH COURT OF SOUTH AFRICA

(LIMPOPO DIVISION, POLOKWANE)

Case No:

In the matter between:

THE HERD NATURE RESERVE, NPC	First Applicant
LIVING LIMPOPO, NPC	Second Applicant
CENTRE FOR APPLIED LEGAL STUDIES	Third Applicant

and

THE LIMPOPO ECONOMIC DEVELOPMENT AGENCY	First Respondent
MEC OF ECONOMIC DEVELOPMENT, ENVIRONMENT AND TOURISM, LIMPOPO	Second Respondent
CHIEF DIRECTOR: ENVIRONMENTAL TRADE AND PROTECTION, DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT AND TOURISM, LIMPOPO	Third Respondent
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT	Fourth Respondent
MUSINA-MAKHADO SPECIAL ECONOMIC ZONE STATE OWNED COMPANY	Fifth Respondent

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FOUNDING AFFIDAVIT

I, the undersigned,

LAUREN LIEBENBERG-SOUTHWORTH

do hereby state the following under oath:

1. I am an adult, female residing in Johannesburg,

2. I am the director of Living Limpopo, the Second Applicant. I am duly authorised to depose to this affidavit on behalf of the Second Applicant.

3. Save to the extent that the context suggests otherwise, the facts deposed herein are within my personal knowledge and are both true and correct. To the extent that I make legal submissions in this affidavit, I do so on advice of my legal representatives, whose advice I believe to be correct.

A. INTRODUCTION

4. This is a review of:

   4.1. the decision by the Third Respondent to grant environmental authorisation (EA) for the Musina-Makhado Special Economic Zone on 23 February 2022; and

   4.2. the decision by the Second Respondent to dismiss the Applicants' appeal against the granting of environmental authorisation for the Musina-Makhado Special Economic Zone on 8 July 2022.

5. The decision relates to the Musina-Makhado Special Economic Zone (MMSEZ). The MMSEZ is made up of two sites and located in two

municipalities namely, Musina and Makhado Local Municipalities within the Vhembe District of the Limpopo Province. The decision relates specifically to the application for Environmental Authorisation for the proposed metallurgical cluster of the Musina-Makhado SEZ as defined in the Scoping Report appended to the 1 February 2019 application.

6. The EA was granted to the Limpopo Economic Development Agency (LEDA) to undertake the list of activities specified on pages 2 and 3 of the authorisation and as described in the Environmental Impact Assessment Report (EIAR) dated 13 September 2021. The EA is attached as "FA1". The EIAR is in excess of 1 000 pages and only the relevant pages are attached as "FA2".

7. The impugned EA that was granted in terms of section 24 of the National Environmental Management Act, 1998 (NEMA) and the Environmental Impact Assessment Regulations, 2014 (EIA Regulations) authorises clearance of vast swathes of indigenous vegetation for the construction and installation of bulk services infrastructure and fencing of the MMSEZ South Site. The splitting of the project in this way is dealt with more fully below.

8. The Environmental Impact Assessment (EIA) process was fatally flawed and procedurally unfair. The EIAR was also fatally flawed and cannot serve as a lawful basis for an EA decision. This is dealt with more fully below.

9. As demonstrated below, the EA granted by LEDET itself falls to be set aside and the Applicants' appeal against the decision to grant the EA ought to have been upheld.

10. The process is fatally flawed in that it constitutes project splitting. After initially applying for EA for the energy-metallurgical cluster of the MMSEZ in its entirety, the application had been altered in the draft EIAR to an application for site establishment only, shrinking the scope of the EIA in relation to the impact of the activities that will be conducted on the site of the heavy industrial zone. The impacts of the proposed MMSEZ have thus been assessed only in terms of vegetation clearance, installation of bulk services and fencing of the South Site. While the scope of the EIA and specialist assessments was broadened to also include the planned industrial development itself and associated impacts, (including climate change, ecological, air quality, health, tourism, agriculture and food security, heritage, visual and noise impacts), in accordance with the "phased approach" that has been adopted according to the EIAR, none purport to comprehensively assess these impacts. The EIA thus fails to adequately assess the cumulative impact of the project as a whole over its operational lifetime. In authorising the irreversible destruction of thousands of hectares of pristine indigenous vegetation, thereby eliminating a carbon sink and harming surrounding local communities who depend on the functioning of an intact ecosystems of the savanna biome and the biodiversity it sustains for food security and livelihoods, this initial EA itself constitutes a breach of the Constitution's section 24 right. Moreover, approval for site clearance and establishment of the South Site of the MMSEZ enables the commencement of the development and thus serves as a *de facto* approval for the MMSEZ itself in the absence of a proper assessment of its impacts.

11. The consequences of the climate crisis cannot be avoided and should not be ignored in the consideration of the impacts of this industrial development. On its own specialists' versions, the coal-based MMSEZ will take South Africa

down a dangerous developmental path, seriously jeopardise our green-house gas (GHG) emissions reduction commitments, with significant economic and political consequences for the country, and flies in the face of the urgent need to decarbonise the economy in order to protect the planet from the serious risks of rising atmospheric temperatures.

12. The study area is already severely water-stressed and climatic modelling for the region predicts rising ambient temperatures, prolonged periods of drought, and greater rainfall variability. On its own specialists' versions, the extremely water-intensive MMSEZ will have profound impacts on water resources and exacerbate already high water security risks, both in South Africa and in neighbouring Zimbabwe.

13. The area in which the MMSEZ South Site is proposed is one of astounding natural beauty. Indigenous vegetation covers most of the site and most of the Vhembe District in which the zone is located. The land cover is still predominantly in a natural state and the ecosystem condition of the region is rated as "good"[1]. The natural capital of the Vhembe and the renewable natural resources yielded by its already sustain a thriving local informal biodiversity-based economy and ensure food security for local rural communities, and have tremendous unrealised green growth potential as the two examples given below demonstrate.

13.1. The iconic baobab tree, *Adansonia digitata*, dominates the landscape and the species comprises 5% of the 109 034 protected trees located on the MMSEZ site.

[1] National Protected Areas Expansion Strategy, 2016 at p. 17 and Vhembe District Bioregional Plan, 2017 - Appendix 1 at p.20

13.2. Sustainably wild-harvested, baobab fruit processed into fruit powder and a high-value cosmetic oil can be sold to both domestic and export markets where demand continues to grow. Eco-Products and the Baobab Foundation, affiliates of the second Applicant, demonstrate the considerable potential of this renewable natural resource to create sustainable livelihoods for the immediate benefit of rural communities in the region, whilst preserving its rich biodiversity, and thus the potential of complementary industries, such as tourism. According to estimates by the Baobab Foundation, the value of the baobab powder and cosmetic oil that could be produced from the trees located on the MMSEZ South Site alone is in the order of R2.8m annually and could benefit up to 250 women harvesters, while the processing of the fruit would provide up to 40 seasonal and permanent jobs per year.

13.3. The potential of such biodiversity-based economic development models as envisaged in South Africa's National Biodiversity Economy Strategy, is severely threatened by the extensive biodiversity loss and severe and irreversible ecosystem damage that will result from development of MMSEZ industrial zone in conjunction its supporting industries, including coal mining, one of the primary raw materials of the metallurgical cluster and given as the rationale for its establishment.

13.4. In the Mopane bioregion that extends across vast tracts of northern Limpopo, the dominant tree species, *Colophospermum mopane*, a drought-resistant hardwood with distinctive butterfly-shaped leaves, is host to a caterpillar species that hatches from eggs laid on the leaves by the native emperor moth, *Gonimbrasia belina*. The mopane worm, together with many other edible

insects, has long formed a part of people's diets in the region and is today regarded as a delicacy.

14. The popularity of this protein-rich food has supported the growth of the informal market in wild-harvested *mashonzha,* which now forms an important part of the informal rural economy. One research study found that traders in the town of Thohoyandou in Limpopo each earn an annual supplemental income of about USD1,400 (about R25,500) from the sale of dried and fresh mopane worms. This study is attached as "FA 3".

15. Euro-centric cultural biases against entomophagy and Western developmental perspectives have historically contaminated agricultural and economic policy, leading policymakers to ignore the economic value and potential of traditional practices and indigenous knowledge systems, but the opportunity has begun to be recognised, as various initiatives developed under the DEFE Operation Phakisa for the Biodiversity Economy demonstrate.

16. Several interested and affected parties have cautioned that based on the studied impacts on these populations of the development of mining and industry in other regions (such as North West where the formerly abundant species has gone locally extinct), the harvesting sites in the vicinity of the MMSEZ and the adjacent Makhado coal mining project could be similarly threatened by the resultant pollution emanating from the zone[2].

17. In October and November 2022, representatives of the Second Applicant canvassed traders in the street markets of Thohoyandou who depend on the harvest of these natural commodities for a living, as well as several

[2] Comments on draft and final EIAR submitted on behalf of WESSA by Dr Cathy Dzerefos and subsequent appeal by WESSA to EA

smallholder farmers in the upper reaches of the Nzhelele River catchment where the MMSEZ is located and other members of this rural community. Few had even heard of the MMSEZ. Those who had were sceptical. All want their voices heard. The Vhembe is their birthright. It has been sold without permission.

B. PARTIES

Applicants

18. The First Applicant is the Herd Nature Reserve, a non-profit company which serves as the Management Authority of The Herd Nature Reserve portion of the Philip Herd Nature Reserve, a declared nature reserve located in the Vhembe District, Limpopo Province, as contemplated in section 38 of the National Environmental Management: Protected Areas Act, No. 57 of 2003.

19. The objects of the company are to develop and manage nature-based tourism and other business opportunities based on the sustainable use of natural and biological resources in support of the primary objectives of restoration, preservation and conservation of the Limpopo Ridge Bushveld savanna biome vegetation sub-type; its biodiversity and rare and endangered species; the integrity of its ecosystems and the sustained supply of critical ecosystem goods and services. The Herd Nature Reserve is located immediately downstream of the proposed MMSEZ Musina Dam on the Limpopo River. The context of the dam is detailed in more detail in the water section below.

20. The First Applicant further seeks to contribute towards the implementation of the National Protected Areas Expansion Strategy; the Limpopo Protected Areas Expansion Strategy; the Limpopo Conservation Plan; the Vhembe Bioregional Plan, the Vhembe Biosphere Reserve's Conservation Plan and the National Biodiversity Economy Strategy in the region.

21. The Second Applicant is Living Limpopo, a non-profit organisation with deep roots in Limpopo. It is a movement forged from a broad alliance of organisations and individuals representing diverse interests - from conservation to the tourism and wildlife industries, farming and rural communities in the Vhembe, to earth, water, climate and social justice activists and ordinary South Africans - who collectively oppose large-scale coal-exploitation, the damming of the Limpopo River and heavy industrial development planned for the MMSEZ.

22. The Third Applicant is the Centre for Applied Legal Studies, a public interest law organisation based at the Wits School of Law. CALS practises human rights law and social justice work with a specific focus on intersecting areas, namely Business & Human Rights; Civil & Political Justice; Environmental Justice; Gender Justice and Home, Land & Rural Democracy. CALS uses a combination of theory and practice to advance human rights, primarily through research, advocacy and strategic litigation. The CALS Environmental Justice programme has been involved in assisting communities in the Vhembe region to participate in sustainably developing their environment over the last decade.

Respondents

23. The First Respondent is the Limpopo Economic Development Agency (LEDA), a provincial government agency established in terms of the Limpopo Development Corporation Act, 5 of 1994 and the implementing agency of the Limpopo Department of Economic Development, Environment and Tourism (LEDET), whose principal place of business is situated at Enterprise Development Gouse, Main Road, Lebowakgomo, Limpopo Province.

24. LEDA is described as follows:

> *'LEDA was established in terms of the Limpopo Development Corporation Act (Act 5 of 1994, as amended). It is established as an integrated platform, culminating from the amalgamation of four historical agencies, namely Trade and Investment Limpopo (TIL), the Limpopo Business Support Agency (LIBSA), the Limpopo Agricultural Development Corporation (LADC) and the Limpopo Economic Development Enterprise (LimDev). The establishment of the amalgamated LEDA was officially announced by the Premier of the Limpopo Province in February 2010 in the State of the Province Address.'*

25. LEDA's stated mission is to implement integrated economic development initiatives, which according to its website, '*reflects its role as the policy implementing arm of the province*'. In terms of its mandate, LEDA is responsible for the facilitation and management of the planning and development of the MMSEZ. An operator will manage all activities inside the MMSEZ.

26. The Second Respondent is the MEC responsible for LEDET, cited in his official capacity and whose principal place of business is situated at Evridiki Towers, 20 Hans Van Rensburg Street, Polokwane, Limpopo Province, % the State Attorney, Pretoria, Ground Floor, SALU Building, 316 Thabo Sehume Street, Pretoria. The MEC was the appeal authority that decided on the appeals against the decision made by LEDET to grant LEDA the EA.

27. In terms of the National Environmental Management Act 107 of 1998 (NEMA) with EIA Regulations, 2014, LEDET was appointed as the competent authority for the MMSEZ EIA application.

28. The Third Respondent, the Chief Director, Environmental Trade and Protection of LEDET is the official who granted EA to LEDA. As will be detailed below, we deny LEDET's designation as a competent authority.

29. LEDET is also mandated with the primary responsibility of managing and monitoring biodiversity in the province. LEDA is a direct reporting entity of LEDET. LEDET was the driving force, funder and approver of the Limpopo Conservation Plan and the Vhembe Bioregional Plan. LEDET was also the endorser of the Vhembe Biosphere Reserve Zonation Plan, which conflicts with and contradicts the proposed land uses for the MMSEZ.

30. LEDET was the competent authority that granted the EA to LEDA.

31. The Fourth Respondent is the Minister of Forestry, Fisheries and the Environment (DFFE), cited in her official capacity, whose principal place of business is situated at Environment House, 473 Steve Biko Street, Arcadia, Pretoria, Gauteng, % the State Attorney, Pretoria, SALU Building, 316 Thabo Sehume Street, Pretoria, Gauteng.

32. The Fifth Respondent is the Musina-Makhado Special Economic Zone State Owned Company (MMSEZ SOC), a wholly owned subsidiary of LEDA and whose offices are situated at Enterprise Development House, Main Road, Lebowakgomo, Limpopo Province. It describes itself as follows:

> '*an entity mandated to develop and operate the Musina-Makhado Special Economic Zone (MMSEZ) in terms of the SEZ Act 16 of 2014, with the main purpose of promoting the Nation's economic growth. The South African Government through the Department of Trade and Industry (DTI) designated the MMSEZ located in the Limpopo Province*.'

33. MMSEZ is cited because of its interest in these proceedings.

C. DECISION ON REVIEW

34. The EA is "mainly for clearance of indigenous vegetation, installation of bulk services infrastructure and fencing only. All other subsequent activities from individual plants/operations/process units must not commence prior to obtaining EAs from the Department and/or organs of state".

35. Paragraph 2 of the EA provides that the EA is the approval in respect of Option 2 as outlined in the EIAR – by reducing the development's footprint from 8 022ha to 3 862ha. However, this cannot be correct as it is only Option 3 in the EIAR that reduces the project footprint, not Option 2. Option 2 is detailed on page 251 of the EIAR as follows:

> *Layout 2 entail the development of the whole site (8013.91ha) for the development of the metallurgical hub. The plan is based on optimal*

land use of the site and does not consider sensitive ecological areas such as wetlands or extending ecological corridor links with adjacent properties. It does not take into consideration the recommendations that were made by the ecological specialists and the updated biodiversity offset report that require some sensitive areas to be avoided. Therefore, this layout option is not supported.

36. While the reference to Option 2 appears to be an error, Option 3 (which reduces the project footprint from 8 022ha to 3 862ha) cannot be supported for the same reasons that Option 2 cannot: Firstly, 3 862ha is still a substantial footprint and secondly, since the overall production capacity of the zone is not substantially reduced, the revised site layout will have no material effect on the cumulative environmental and other impacts of the zone. At the April 2022 public participation meetings facilitated by the former DeltaBEC EAP, the findings of the specialist reviewer's report (a report which has never been released to interested and affected parties), the remedial Action Plan (which LEDET had instructed the EAP to devise in order to remedy the deficiencies of the final EIAR) and the revised site layout and reduced footprint site were presented. In the accompanying Feedback Report of the engineers, iX Engineers, the following is conceded in respect of the utterly inappropriate site selection and the resultant amplified impact of the development:

The MMSEZ site was designated in 2017 before any EIA was undertaken. There were no additional or alternative sites at that stage that were looked at. LIEDA indicated that due to the site being designated, they are not going to look at any alternatives or site alternatives. When the Scoping Report was submitted, one of the conditions for approval, i.e. a site selection matrix

or site alternative in terms of the National Environmental Management Act, 1998 with the EIA Regulations, 2014 (as amended) was not met and LEDET still approved the final scoping report. The interested and affected parties have highlighted this to us on various occasions. This was also highlighted in the draft and final EIA report as risks and gaps and the independent reviewer indicated that due to the biodiversity offset for such a big site; the net gain of loss could not be verified. This was also highlighted by Dr. Ola. The independent reviewer thus said that alternative methods should be investigated. The only alternative is either to reduce the site footprint and all the site sensitivities or look at an alternative site. The Environmental Action Practitioner (EAP) requested iXEngineering on 31 March 2021 to look at a reduced site footprint and to exclude as far as possible the sensitive areas, which would thus make the biodiversity offset more realistic and net gain of loss more viable. iXEngineering provided a revised layout.

37. The revised layout of the site reduces the footprint by moving the lighter industries as well as the lime and cement plant to the North (Actonvilla) Site and by moving the reduced power plant (1320 MW plus 50 MV solar preferably on roof tops) onto the site. According to the report, the revised layout now allows for a natural buffer and will 'accommodate more of the sensitive biodiversity areas and drainage areas requiring less offset'. However, considering the nature and unchanged scale of the metallurgical activities planned for the MMSEZ, and the fact that no real consideration is given to how the revised layout in fact renders 'biodiversity offset more realistic and gain of loss more viable', Option 3 can be regarded as little more than a superficial variation on Option 2 for the MMSEZ.

38. The EA fails to comply with the prescribed content of an EA as set out in regulation 26 of the EIA Regulations, including the commencement and completion date for non-operational aspects of the activities, as well as the frequency of environmental auditing and submission of environmental audit reports.

39. The Applicants appealed the decision by LEDET to grant EA. The MEC made a final decision to dismiss the appeal on 08 July 2022.

40. Both the EA and the appeal are the subject of this review.

D. HISTORICAL BACKGROUND TO PROJECT

41. This review is complex – the MMSEZ is the largest Special Economic Zone in South African history and the adverse impacts that it will have on numerous aspects of the environment is commensurate with its size, if not greater. As such, a detailed exposition of the background to the project and complex legal framework is necessary.

42. The SEZ Policy is a cornerstone of industrial policy under the purvey of the DTIC, and as noted above, the MMSEZ is the biggest such industrial development in South Africa's history. It will more than double South Africa's steel production capacity, and will cost an estimated R344billion (US$22billion) to develop according to the developer's plans.

43. The MMSEZ project officially started in 2014 when the Department of Trade and Industry (DTI) requested the Limpopo Provincial Government to submit areas for evaluation viewed as strategic for the development of the Limpopo

economy through industrialisation. Following preliminary studies, Limpopo Province submitted four areas identified as potential growth nodes in the province.

44. The DTI evaluated the submission, approving two of the areas for further feasibility investigation, namely Musina-Makhado and Tubatse.

45. Thereafter the Limpopo provincial government proposed the establishment of a Special Economic Zone (SEZ), a type of industrial zone, at Musina focussed on petro-chemicals, agro-processing and logistics. In 2015, the proposal was revised to the current concept of what is now known as the Musina-Makhado Special Economic Zone, comprising two components at two different locations: a light industrial site at Antonvilla near Musina (Site 1 or North Site) and a heavy industrial site (primarily steel manufacturing and power generation) at a location approximately 50 km to the south of Musina, north of the Soutpansberg mountains on the Musina-Makhado municipal boundary (Site 2 or South Site).

46. Site 2, which is the subject of this review, is variously referred to as South/Makhado/Bokmakierie Site of the MMSEZ; the energy-metallurgical zone of the MMSEZ or EMSEZ and the Musina-Makhado SEZ or MMSEZ.

47. The land on which the SEZ is located belongs to a Communal Property Association (CPA), the Mulambwane Communal Property Association (MCPA), which has leased the land to the state for the development under the terms of a now contested lease agreement.

48. The application for designation of the site as a SEZ was supported by the DTIC and in December 2017, despite grossly incomplete feasibility studies

and other preliminary steps as required under the SEZ Act, No. 16 of 2014 and regulations made under the Act, an area of 7 262 ha encompassing a total of eight farms, was designated as the South African Energy and Metallurgical Zone of the Musina-Makhado Special Economic Zone (EMSEZ) by government gazette notice.

49. The appointed Environmental Assessment Practitioner (EAP) from Delta BEC initiated the EIA application in early 2019 and concluded the EIA process up to submission of the Final EIAR to LEDET in February 2021. LEDET reviewed the report and requested some additional information. EnviroXcellence Services (EXS) was then appointed as the new EAP, and in September 2021 issued a Revised Final EIAR.

50. The Delta EIA study (explained below) describes the strategic thinking behind the location in its introductory project overview:

> *'The establishment of a metallurgical cluster near the source of raw materials, along with a logistics hub in the SEZ with access to markets is considered to present a unique opportunity for mineral beneficiation, which is a national key government priority. There is clearly several downstream and upstream opportunities in the supply chain if the SEZ is located close to a main corridor, in this case the North-South Development Corridor.'*

51. The Delta EIA study is a voluminous document and is not attached to this application.

52. The proposed scale of the overall project is important to bear in mind, as the potential to radically alter the environmental, social, and economic landscape

of the region necessitates considered decision-making. As noted above, the MMSEZ, as scoped in the EIAR, will constitute “the largest single planned SEZ development in the country” if it comes to fruition. The emissions released by the industrial plants within the zone over its operational lifetime of thirty years will consume as much as 10% of South Africa’s carbon budget, making the project’s climate impacts alone absolutely dire. The impact on scarce water resources will be comparably disastrous. Apart from environmental impacts, which will in turn significantly impact other sectors of the regional economy, including agriculture and tourism, the impact on the South African fiscus given the cost of developing the zone, will be significant.

53. The decision to issue the EA came after a highly protracted process that far exceeded the ordinary timeframes stipulated in the NEMA EIA regulations. The process, based on the EIA timeframes, expired around May 2021.

54. The original EAP, DeltaBEC, submitted the Draft EIAR in September 2020 and the Final EIAR in February 2021. The Final EAIR did not recommend authorisation. In March 2021 LEDET responded to DeltaBEC’s Final EIAR and requested an Action Plan “to address outstanding issues”. DeltaBEC initiated this process, including a remedial but again flawed round of public participation. However, in May 2021, DeltaBEC served notice that it was suspending all actions in response to the LEDET instruction to the EAP.

55. LEDA then appointed a new EAP, Enviroxcellence to revise the EIAR. The associated public participation was flawed, with reports of community members being barred from meetings. The revised EIAR was submitted by the new EAP to LEDET in September 2021.

56. On 23 February 2022, LEDET, through the Chief Director: Environmental Trade and Protection took the decision to grant environmental authorisation for the MMSEZ South Site solely for the following activities: clearance of indigenous vegetation, installation of bulk services infrastructure and fencing.

57. The decision included a table of the findings of the specialist reports concluding that the development does not conflict with the principles of integrated environmental management in chapter 5 of NEMA and that all mitigation measures could reduce any environmental impacts to acceptable levels.

58. Multiple internal appeals were submitted to LEDET in terms of Section 43 of NEMA, including but not limited to appeals by All Rise Attorneys and CALS, Birdlife SA; Natural Justice; WESSA (Wildlife and Environment Society of South Africa); Earthlife Africa, groundWork, Dzomo La Mupo and MEJCON-SA (represented by the Centre for Environmental Rights); and the Vhembe Biosphere Reserve, a UNESCO MAB Biosphere Reserve, the Endangered Wildlife Trust, Herd Reserve and the Vhembe Mineral Resources Stakeholders Forum (represented by Christo Reeders Attorneys).

59. On 8 July 2022, the Executive Council of LEDET took the decision to reject All Rise Attorneys' and CALS' appeal. This constituted the finalising of the internal appeal process and the commencement of the 180-day period under PAJA for instituting a judicial review of a decision. The review process under PAJA will be discussed in the legal framework section below.

60. Importantly, all the internal appeals mentioned above were rejected without adequate reason given.

61. The 180-day period expires on 04 January 2023.

E. LEGAL FRAMEWORK

62. As an introduction, the environment law framework places a positive obligation on the state to plan reasonably, rationally and responsibly in the management and sustainable usage of ecological resources.[3]

63. From a spatial planning perspective, South Africa inherited a system regulated by numerous pre-1994 pieces of legislation, characterised by various bodies undertaking fragmented parallel processes, manifesting in unequal, incoherent and inefficient settlement patterns.[4]

64. In an effort to address this disjointed and unaligned system, the Spatial Land Use Management Act 16 of 2013 (SPLUMA) was promulgated. SPLUMA attempts to harmonise land-use planning while embodying constitutional principles of, inter alia, equality, dignity and environmental protection.[5] Knowledge and information advancements have led to increased confidence in systematic land-use and developmental planning, so much so that spatial information has now become a requirement in local economic development planning.

65. This framework embodies principles of integrated multi-sectoral development planning and sustainability, adopting the usage of environmentally-focused spatial planning tools to inform developmental decision-making. These tools have proven to assist in facilitating more holistic, less destructive and more inclusive economic growth and development, through *inter alia* identifying

[3] In terms of NEMA definition of sustainable development 'planning' forms a central part of the understanding of the principle. Section 1 of NEMA.
[4] SPLUMA White Paper.
[5] Section 12(1)(i) of the Spatial Land Use Management Act No. 16 of 2013

areas of environmental sensitivity and assigning appropriate compatible land-uses for such areas within a context of robust stakeholder engagement.

66. The above and other key legal instruments and provisions especially relevant to a review of an environmental authorisation are detailed below.

The Constitution

67. A progressive feature of the Constitution is that it confers an environmental right on all. There are several distinct features of Section 24 of the Constitution.

68. The ambit of the right is broad, being the right of everyone to an environment that is not harmful to their health or well-being. This means that not only interests based on physical attributes of the environment but also interests based on broader attributes (cultural, spiritual, aesthetic attributes, amongst others) are protected.

69. A positive duty is imposed to undertake legislative and other measures to advance the right which moreover are for the benefit of both present and future generations.

67. Measures must achieve three identified objectives namely:

69.1. preventing pollution and ecological degradation;

69.2. promoting conservation; and

69.3. securing ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

70. These parameters give rise to environmental legislation and provide a basic framework for their content and their application. Critically the sustainable development approach of balancing environmental with social and economic considerations is enshrined.

The National Environmental Management Act (NEMA)

71. NEMA is the framework environmental legislation which sets in place the fundamental principles, processes, allocation of powers and duties etc. that frame environmental management in South Africa, The NEMA framework governs the multiple specific environmental management acts enacted to deal in more detail with particular aspects of the environment and environmental management.

72. Section 2 of NEMA frames the founding principles of environmental management. These principles must be considered in all forms of decision-making that have an impact on the environment, from the creation and understanding of legal rules to the processing of environmental authorisations (EAs).

73. Sustainable development is a central founding principle of NEMA, the definition of which recognises planning as a core facet to the successful realisation of the principle.

74. Moreover, NEMA takes a holistic approach to environmental management, aiming to ensure the creation of socio-ecological systems where the ecosystems and society function in an integrated and planned manner.

75. Environmental justice is one of the central Section 2 NEMA principles that permeate the environmental legal framework. The right to equality, which is realised through the distributive paradigm, is an essential element of environmental justice, representing not only the distribution of negative impacts, but the equitable allocation of benefits amongst all sectors of society, with particular focus on marginalised communities. There are a number of other NEMA principles that are highly relevant to decision-making in relation to MMSEZ but have been ignored. These are discussed in the sections that form the grounds of review.

76. Spatial and environmental justice are intricately intertwined, as marginalised communities are often located in more rural, less urbanised areas where service provision is poor and exposed to highly impactful developments such as mining, which yield little socio-economic benefit to such communities which disproportionately bear the externalised costs.

77. Section 24 of NEMA sets out the broad framework for environmental authorisation. Section 24 (4) provides the basic parameters governing EIA processes. Especially relevant to this review are the following:

77.1. Investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity;

77.2. Investigation of mitigation measures to keep adverse consequences or impacts to a minimum; and

77.3. Reporting on gaps in knowledge, the adequacy of predictive methods and underlying assumptions, and uncertainties encountered in compiling the required information.

78. Also of high relevance to any review is Section 24O which provides the criteria that competent authorities must take into account when considering applications. Of particular importance are the following:

78.1. If the Minister, the Minister responsible for mineral resources or an MEC, considers an application for an environmental authorisation, the Minister, Minister responsible for mineral resources or MEC must-

78.1.1. take into account all relevant factors, which may include-

78.1.1.1. any pollution, environmental impacts or environmental degradation likely to be caused if the application is approved or refused;

78.1.1.2. the ability of the applicant to implement mitigation measures and to comply with any conditions subject to which the application may be granted;

78.1.1.3. where appropriate, any feasible and reasonable alternatives to the activity which is the subject of the application and any feasible and reasonable modifications or changes to the activity that may minimise harm to the environment;

78.1.1.4. any information and maps compiled in terms of section 24 (3), including any prescribed environmental management

frameworks, to the extent that such information, maps and frameworks are relevant to the application;

78.1.1.5. information contained in the application form, reports, comments, representations and other documents submitted in terms of this Act to the Minister, Minister responsible for mineral resources, MEC or competent authority in connection with the application.

79. Section 24O of NEMA requires that "all relevant information" be considered by decision makers. This requirement means that climate change impact assessments are required prior to authorising a coal-fired power station, as it would constitute relevant information for the purposes of section 24O.

80. It is important to note here that the requirements stated immediately above were not considered by the decision-maker. For if it was considered, the EA would not have been granted.

81. The Minister of Forestry, Fisheries and the Environment, Barbara Creecy, published a draft Guideline on assessing climate in licensing applications for comment.[6] The guidelines do not create a new EIA process but provide guidance on a climate assessment within the broader EIA process giving cognisance to South Africa's commitments made as a signatory to the United Nations Framework Convention on Climate Change as well as recent case law. This includes guidance on the circumstances in which a climate assessment is needed, and basic principles and steps in this assessment.

[6] Consultation on intention to publish the national guideline for consideration of climate change implications in applications for environmental authorisations, atmospheric emission licenses and waste management licences of 25 June 2021(GNR 559).

82. There are several other guidelines published in terms of Section 24J of NEMA regarding the implementation and administration of the EIA Regulations. These include the Guideline on Need and Desirability, 2017.

NEMA: EIA Regulations (2014 as amended)

83. The EIA considers, investigates, assesses, and reports on potential environmental impacts of listed activities to the competent authority as a condition before receiving an EA.

84. EIAs are required by NEMA and regulated by the Environmental Impact Assessment Regulations of 2014 (EIA Regulations). The EIA Regulations create thresholds of impact which require either a basic assessment or more comprehensive full scoping and EIA in order to receive the EA for the specific listed activity.

85. The EIA is the principal developmental planning mechanism in the consideration of the sustainable utilisation of natural resources, understanding environmental impacts and the value of environmental goods and services.

86. EIAs are supported by a variety of principles in the risk assessment process, including IEM, sustainable development, the precautionary principle, risk averse approach and cumulative impact.[7] The system recognises the conflict between conservation and development, utilising practical principles, such as IEM and the mitigation hierarchy as core elements of pre-emptive long-term

[7] Appendix 1 of the EIA Regulations.

planning. EIAs and the associated regulations give effect to the objectives of ecosystem-centred integrated environmental management.

87. Sensitivity is specific to every receiving environment, being based on a particular time and regional spatial character. Therefore, when assessing scale and spatial awareness the EIA process seeks to ensure ecologically-integrated and holistic site-specific impact assessments that take regional cumulative impact into consideration.

88. Scale is seen as a central metric, as the application for an EA must comprise of a description of the location of the proposed activity in the form of cadastral mapping, the appropriate scale for the activity, and the co-ordinates of the boundary properties. Mapping is also required as part of the specialist reports, often superimposing the activity, associated structures and infrastructure on the environmental sensitivities of the site. Such a superimposition would additionally include outlining areas to be avoided and considered, including buffer zones.

89. The EIA process not only assesses impact but facilitates the further consideration of viable less harmful alternatives, ensuring that the planned activity aligns with the intended regional growth model.

National Environmental Management: Biodiversity Act

90. The National Environmental Management: Biodiversity Act (NEM: BA) operates within the NEMA framework as a specific environmental management act, expressly providing for the management and conservation of biological diversity. One of the objectives of NEM: BA is to give effect to ratified

agreements relating to biodiversity which are binding on the Republic and which include the Convention on Biological Diversity.

91. NEM: BA is supported by nationally relevant policies and strategies that facilitate the forward planning for biodiversity management, principally including the National Biodiversity Framework (NBF)[8] and the National Biodiversity Strategy and Action Plan (NBSAP).[9]

92. The NBF establishes an 'integrated, co-ordinated and consistent approach to biodiversity management by all private and public stakeholders', focusing on priority actions that are reviewable over a five year cycle. The NBF is an ecologically and spatially representative platform that maps all sensitive biodiversity and aligns medium-term priorities with local development planning, supporting and aligning environmental decision-making. The NBSAP, while aligned to the NBF, provides a spatial description of sensitive ecosystems, identifying broad priority areas and long-term strategic objectives for managing biodiversity The NBSAP includes a direct spatial component, the National Biodiversity Assessment (NBA), which will be discussed further below.

93. To practically realise these goals NEM: BA introduces a set of nationally applicable biodiversity-focused spatial planning tools; examples include bioregional plans and biodiversity management plans. These tools can assist the practical alignment of biodiversity, cultural and water resource concerns in developmental planning and decision-making.

94. A common feature of the systemic biodiversity plans is the importance attributed to CBAs and ESAs, informing the multi-sectoral planning and

[8] National Biodiversity Framework GN 813 in GG No. 32474 of 3 August 2009.
[9] S 43(1) of NEM: BA.

decision-making processes in land-use planning, EAs and natural resource management.

Bioregional Plans

95. Bioregional plans provide guidelines for the management of significant biodiversity and form part of the tools identified by NEM: BA, embodying the principles of IEM, integrated development planning and sustainable development. These plans provide a cross-sectoral platform that determines the conservation status of identified priority areas and then supports their conservation planning and monitoring.[10] The design and construction of a bioregional plan is generally driven by the appropriate provincial conservation authority and is then designated, gazetted and published by the Minister or MEC.[11]

96. The bioregional plan is classified as a systematic biodiversity plan which adopts the principle of representation. In terms of this principle, the focus of the conservation action will be to identify specific areas which will portray a representative sample of all biodiversity patterns.

97. Bioregional plans have special significance for local economic development and are of particular importance to local and district municipalities. NEM: BA requires that 'a bioregional plan is coordinated and aligned with existing plans', such as municipal IDPs, and by implication SDFs.[12] Once published, the plan becomes assimilated into all land-use and developmental processes.

[10] S 37 of NEM: BA.
[11] S 40 (1)(b) of NEM: BA.
[12] S 48(1) of NEM: BA.

98. A published and gazetted bioregional plan must be considered by the municipality and sectoral departments during the developmental planning process.[13]

Spatial Planning Legal Framework

99. The Municipal Systems Act (MSA) caters for the fundamental values, tools and procedures to empower municipalities to serve communities by ensuring equitable access to necessary services.[14] The MSA defines the legal nature and legislative powers of municipalities, establishing a structured system for strategic and integrated municipal planning, performance management and the use of municipal resources.

100. The MSA sets out the requirement for municipalities in South Africa to develop both individual IDPs, including SDFs[15] in order to manage the land-use system.[16]

Integrated Development Plans (IDPs)

101. The MSA obliges municipalities to design and implement a five year annually reviewable IDP in order to address the identified developmental issues, guiding and planning broad-based management and expenditure.[17] The local and district municipalities bear the responsibility to formulate and implement IDPs, apportioning them legal status, superseding all intersecting plans that concern development within local government.

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[13] S 48(2) of NEM: BA.
[14] Preamble of the Municipal Systems Act No.32 of 2000.
[15] Little is said about the SDF in the MSA, this is detailed in SPLUMA and dealt with under this section.
[16] S 25 and S 26 of the MSA.
[17] The Act also requires municipalities to review the IDP on an annual basis and reflect on progress made.

102. The IDPs thus carry significant weight within the local developmental planning metric, as they reflect the vision for the development of the municipality, with special emphasis on the most critical development and internal transformation needs.[18]

103. The MSA has self-imposed environmental obligations, committing to provide services in an environmentally sustainable manner. An explicit municipal duty exists to ensure that environmentally-sensitive land is protected and conserved.

104. The responsibility of environmentally-conscious planning and protection is therefore a core obligation of local government, even though the 'environment' is not an explicit functional competency, municipal planning must recognise the Section 24 Constitutional environment rights.[19]

105. Therefore, it is vital that both SDFs and IDPs have strong environmental policy considerations. Sensitive areas must, consequently, feature in the decision-making of municipal planning, especially where a high ecological value is present.

106. The MSA requires that IDPs must be compatible, aligned, integrated and reflective of all national and provincial development plans and planning requirements in order to reflect the common growth strategies and sector plans.[20] IDPs therefore play the role of linking, integrating and co-ordinating all intra-departmental, provincial and national development plans, supporting and integrating with the applicable SDF.[21]

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[18] S 26(c) of the MSA.
[19] S 23(1)(c) of the MSA.
[20] S 25 of the MSA and S 41 of the Constitution.
[21] Chapter 5 of the MSA.

107. However, on a local level the most important integration must occur between the municipal IDPs and SDFs, as these instruments are integral to fulfilling the local integrated planning function. The spatial analysis section of the IDP provides the existing spatial pattern, growth points and population concentrations that have emerged in the municipal area, while spatial detail, challenges and opportunities are contained in the SDF.

108. The spatial future of an area is based on the collective decisions regarding land-use, characteristics and developmental drivers of the area.

109. The IDP must involve the local community in the development, implementation and review of the municipality's performance management system and, in particular, allow the community to participate in the setting of appropriate key performance indicators and performance targets for the municipality.[22]

Spatial Planning and Land Use Management (SPLUMA)

110. The Spatial Planning and Land Use Management Act (SPLUMA)[23] centralises the land-use planning system and embodies constitutionally entrenched principles of, among other things, equality, dignity and environmental protection.[24]

111. To ensure that development takes place in an integrated and sustainable manner, the IDPs and SDFs of municipalities now have to be aligned with the principles and requirements of SPLUMA.

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[22] S 42 of the MSA.
[23] SPLUMA had been assented to in 2013 but had not been officially promulgated until the 1st of July 2015 due to various practical implementation challenges, including a lack of skills, capacity and resources on the part of the municipalities to drive the establishment of IDPs and other frameworks. SPLUMA is now operational as per GN 26 in GG 38828 of 27 May 2015.
[24] S12(1)(i) of the SPLUMA.

112. The goal of SPLUMA is to establish an inclusive, equitable and efficient spatial planning and land-use management framework, supporting uniform approaches to decision-making by authorities.

113. SPLUMA endeavours to align planning principles and law into one clear and unambiguous system, founded on constitutionally protected rights including the right to environment, water, food and housing. It integrates constitutional principles and considerations into IDPs and SDFs, providing an opportunity to encourage sensitive area protection and sustainability into developmental planning.

114. The scope of the municipal function within the spatial planning framework expanded dramatically as a result of the enactment of the SPLUMA, and the recent judgments of the Constitutional Court. Each province is empowered by the Constitution to pass provincial planning laws to further regulate municipal planning in that particular province and to also regulate the provincial government's own planning.

Spatial Development Frameworks

115. A SDF is a 'compulsory framework that seeks to guide the overall spatial distribution of desirable land-uses within a municipality in order to give effect to the vision, goals and objectives of the municipal IDP'.[25]

116. The SDF is seen as a central element of the IDP, encapsulating the spatial policy and developmental aspirations of the area, and identifying resources and developmental potential in order to maximise sustainable growth.

[25] S 26(e) of the MSA.

117. Although the MSA requires the SDF construction, there are no details on how this must occur, this is housed in SPLUMA.

118. Broadly, the SDF hopes to assist all levels of government to address key problem areas and establish a more balanced spatial development pattern for the province with an integrated settlement hierarchy.

119. From a practical perspective, the SDFs are used to assist any developmental application process during the proposal stage, allowing the developers and decision-makers insight into the overall view of spatial sensitivities and impacts within the region.

120. The SDFs are strategic in nature and aimed at the integrated development of the municipality, co-ordinating various sector plans, aligning municipal resources and capacity in an effort to fulfil the objectives of the IDP.

121. The national and provincial spheres of government and each municipality must formulate SDFs that represent the incorporation of all relevant departmental policies and plans, especially appreciating and assimilating any adopted environmental management instrument.[26]

122. From an environmental management perspective, it's crucial that SDFs have strong environmental policy considerations. Environmentally focused spatial planning tools, such as EMFs for instance, practically support the SDFs vision, informing and guiding planning decisions of the SDF.

Promotion of Administrative Justice Act (PAJA)

[26] S12(1)(m) of SPLUMA.

123. The Constitutional right to administrative justice (Section 33) mandates legislation to give effect to this right. Therefore, the Promotion of Administrative Justice Act (PAJA) was promulgated.[27] PAJA governs all conduct and judicial review conduct that meets the threshold of the definition of administrative action. The decision to grant an environmental authorisation to the MMSEZ is a clear cut example of administrative action as per the definition. It was a decision (to grant an environmental authorisation), by an organ of state (LEDET), exercising a public power in terms of the Constitution and legislation (NEMA and the EIA regulations), it adversely affects rights (including environmental rights), has a direct, external legal effect and does not fall into the list of nine exclusions.[28]

F. SUMMARY OF REVIEW GROUNDS

124. The EIA, appeal process and public participation process were procedurally unfair as it excluded numerous interested and affected persons.

125. Project splitting of the EIA process has resulted in this EA being granted for only one aspect of the entire project. This one aspect is dependent on the numerous other EAs for all the subsequent aspects being successful. However, according to the various specialist studies such as climate impact, water and energy, there are a number of uncertainties that exist and many more studies and assessments to be done. Project splitting of this nature has ultimately resulted in a failure to adequately consider the need and desirability of the project.

[27] Act No. 3 of 2000.
[28] Section 1 (aa) – (ii) of PAJA.

126. The applicant for EIA and the decision maker failed to consider the applicable developmental and spatial plans of South Africa.

127. There has been a failure to adequately present the need and desirability of the project.

128. The action is not rationally connected to the information before the administrator; or the reasons given for it by the administrator in that the decision maker considered the damning findings of the climate impact assessment, water security and the energy assessment and granted the EA anyway.

GROUNDS OF REVIEW

LEDET's dual role as EA applicant and decision maker

129. Under the leadership of the MEC: LEDET, the MMSEZ was designated as a Special Economic Zone (SEZ) in July 2016 and was gazetted in December 2017 in terms of the Special Economic Zones Act 16 of 2014.

130. The MMSEZ SOC entity was registered in March 2017. MMSEZ SOC is a wholly owned subsidiary of LEDA, which is itself a state-owned company wholly-owned by LEDET, established in terms of the Limpopo Economic Development Agency Act 5 of 2016 as the implementing agency of LEDET.

131. The EIA application and Scoping Report (SR) were submitted by LEDA to LEDET which administered the EIA process and ultimately issued the EA to MMSEZ SOC.

132. Section 3(1) of the PAJA requires procedurally fair administrative action. Administrative action is reviewable where the administrator who took the decision is biased or reasonably suspected of bias, or when a decision was taken by an administrator who lacked the authority to do so.

133. There is a clear conflict of interest between MMSEZ SOC/LEDA, who is the applicant for the MMSEZ EA, and LEDET, who is the decision maker in terms of granting EA.

134. There is evidence of bias on the part of the MEC who decided the appeal. On page 15 of LEDA's latest available annual report the MEC speaks of the MMSEZ in glowing terms and as though the various authorisations therefore are a foregone conclusion. This makes his bias clear. The report is attached as annexure "FA 4". This conflict violates the Applicants' rights to procedurally fair administrative action both in the decision-making process and in this appeal process.

135. Consequently, the EIA process upon which the EA is based is fatally flawed and falls to be set aside.

136. This flaw goes to the very heart of the environmental authorisation process.

EIA and Public Participation process procedurally unfair

137. The public participation in an environmental authorisation process must not only meet the minimum commenting requirements set out in the EIA Regulations but must also meet the requirements of section 3 of PAJA, applicable provisions of the South African Constitution, and the NEMA Public Participation Guideline. Interested and affected parties must be afforded an

opportunity to make meaningful representations, which also requires access to all relevant information.

138. On 15 September 2021 the Applicants sent a letter to the new EAP to inform it that although comments to the draft EIAR were submitted on 22 October 2020, no response was received.

139. We also requested a copy of the Comments and Response report to ascertain whether our comments, as well as those comments submitted by other interested and affected parties were addressed in the latest version of the EIAR. A copy of the letter is attached as “FA 5”.

140. This is required not only in terms of Appendix 3 of the EIA Regulations, but also in terms of Regulation 13(1)(f). According to Regulation 43 of the EIA Regulations, all interested and affected parties are entitled to comment on all reports or plans and Regulation 3(8) of the EIA regulations requires the commenting period to be at least 30 days. PAJA also requires a reasonable and fair administrative process, requiring proper notification to the public and a commenting process.

141. The Applicants’ attorneys informed the EAP that since numerous interested and affected parties had been excluded from the EIA process and all relevant documents, including the EIA documents, have not been made available to the public, the public participation process was defective, and did not meet the NEMA and the EIA regulation requirements, or reasonable administrative decision-making process requirements in terms of PAJA.

142. No response to this letter was received.

143. When the comments and response report was made available on the EAP website, it was noted that there were no responses to the comments – the response column is blank. This is evident from annexure “FA 6”.

144. Section 1(h) of Appendix 3 of the EIA Regulations requires public comment to be incorporated into the assessment, or an explanation of why certain comments were not incorporated.

145. The EAP proceeded under a shortened time frame that the EAP acknowledged made it impossible for specialists to incorporate the prior round of comment that closed on 22 October 2020 into its reports, address all comments, or provide a summary of all comments received. This is evident from annexure “FA 6”.

146. Section 2(4)(f) of NEMA requires effective public participation. For public participation to be effective all registered interested and affected parties must be provided with a reasonable opportunity to comment and must be allowed to comment on any issues which that party believes may be significant.

147. An EIA must include, among other things, a summary of the issues raised by interested and affected parties, and an indication of the way the issues were incorporated, or the reasons for not including them. These regulations are meant to ensure that the public participation process “provide[s] access to all information that reasonably has or may have the potential to influence any decision with regard to an application.” This was not complied with.

148. To further exacerbate the problematic public participation process, the LEDET appeal form states that emailed submissions will not be accepted in the appeal process but that "*Appeals should be hand delivered or posted to the office of the MEC for Limpopo Department of Economic Development, Environment and Tourism*."

149. In terms of S 47D(1) (bB) of NEMA a notice or other document in terms of this Act or a specific environmental management Act may be issued to a person *by e-mailing a copy of the notice or other document to the person, if the person has an e-mail address.*

150. According to PAJA, for administrative action to be procedurally fair, the decision maker must provide:

150.1. "adequate notice of the nature and purpose of the proposed administrative action;

150.2. a reasonable opportunity to make representations;

150.3. a clear statement of the administrative action;

150.4. adequate notice of any right of review or internal appeal, where applicable; and

150.5. adequate notice of the right to request reasons in terms of section 5."

151. Section 5 of PAJA also states that the decision-maker should provide <u>adequate</u> reasons for the decision; failing which, for the purpose of judicial review proceedings, the action will be deemed to have been taken without good reason.

152. The public participation process was fatally flawed and, on this basis alone, the EA falls to be set aside.

Project Splitting the EIA process

153. By issuing the EA, LEDET has validated the practice of "project splitting" in relation to environmental authorisation. In this case, the practice takes the form of artificially limiting the scope of the so-called impacted environment to clearance of indigenous vegetation, installation of bulk services infrastructure and fencing. The effect of this is that the environmental impact of the entire development is underestimated in the EIA and requires the application for separate EAs for activities which are more contentious, on an already cleared and prepared site – effectively a *fait accompli*.

154. According to the EIAR, the construction of the bulk services and fencing will "secure the site for future development opportunities" thereby assuming that once this part of the project is done, the rest of the development is a foregone conclusion.

155. To reiterate this point, the EIAR states that:

> *"[t]his environmental authorisation application f*ocuses on applying for transformation of land through vegetation clearance and the installation of services *for future developments of the land*". The future EAs that will be required for the MMSEZ are clearly pronounced as being potentially problematic in the EAIR, for example it states: *"It is understood that access to a dedicated water supply will need to be secured to allow for further development of the metallurgical hub of the MMSEZ South site*"

156. And further:

> *"[d]ue to the perceived impact of the coal fired plant on GHG emissions it is proposed that a separate EIA be undertaken for it due to the fact that establishment of power generating facilities exceeding 20MW is a listed activity that should be undergo the EIA process and authorised prior commencement. This will allow for further investigations into a phased plant, clean technology as well as the option to access electricity from possible other more renewable sources."*

157. Further that:

> "*The proposed development can however not be seen in complete isolation as it will prepare the site for future industrial developments. However, as the developments will trigger listed activities in terms of the EIA Regulations of 2014, as amended, each developer will be required to undertake a stand-alone EIA*."

158. Furthermore:

> "*Mitigation potential is considered high for the proposed project relating to vegetation clearance, installation of bulk services and fencing. However, for future potential industrial developments mitigation may be difficult due to the scale and bulk of future project activities*."

159. Segmenting the various MMSEZ projects into different environmental impact assessment processes is highly problematic and results in piecemeal

environmental authorisations for activities when, in fact, the final outcome may never be reached.

160. This is called “project-splitting”.

161. It is the Applicants’ opinion that this project takes it one step further in that not only will the premature environmental analysis be meaningless and financially wasteful, but it will also result in large-scale destruction to the environment and the livelihoods of individuals and communities that rely on that environment.

162. In the United States, regulations implementing the national law on environmental impact statements require that all connected actions must be assessed at the same time. When determining, at an early stage, the scope of issues for analysis (a scoping report), or when preparing a “full and fair” environmental impact statement, agencies must examine “connected actions” that “are closely related and therefore should be discussed in the same impact statement.” Actions are closely related when they:

162.1. Automatically trigger other actions that may require environmental impact statements;

162.2. Cannot or will not proceed unless other actions are taken previously or simultaneously; or

162.3. Are interdependent parts of a larger action and depend on the larger action for their justification. This requirement is “directed at avoiding segmentation, wherein the significance of the environmental impacts

of an action as a whole would not be evident if the action were to be broken into component parts and the impact of those parts analysed separately."

163. Similarly, EIA Regulations require that cumulative impacts must be assessed, and cumulative impact is defined as "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."

164. Thus, although the EA under appeal is "only" for the clearance of vegetation, fence building and bulk services infrastructure, the consequences are one of two things:

164.1. an extensive area of indigenous vegetation will be removed (it is not clear how much nor how many of the 109 000 protected trees will be destroyed in the Option 3 layout scenario, if the reference to Option 2 in the EA is indeed a clerical error), the land fenced and bulk services infrastructure established, only to have, at a later stage, industry-specific applications for EAs being refused , and/or insufficient energy[29] and water supply[30] being secured (or a multitude of other scenarios) resulting in the whole project becoming a proverbial white elephant; or

[29] "The energy specialist report will need to be updated once industry specific EIA applications are submitted to the CA.."Page 915 of EAIR.
[30] "Water availability currently is only available for the first couple of years in the MMSEZ *South Site development."* Page 915 of the EIAR.

164.2. the piecemeal projects are authorised and the combined effect is catastrophic for all the reasons cited in the many comments and appeals submitted.

165. The EA for the MMSEZ South Site has no safeguards built-in for these very possible scenarios. It essentially permits massive environmental degradation at high risk and in the face of great uncertainty. Moreover, the activity permitted by the EA has no intrinsic economic value but only large scale adverse impacts.

166. Project splitting of this nature is thus highly problematic and should not be proactively approved or reactively condoned. It should definitely not be condoned when water management, transport infrastructure, climate change and energy security are at stake, as is detailed below.

167. Strategic planning and strategic environmental assessment (SEA) go a long way to avoid project splitting and this is discussed more fully below.

Failure to properly consider the Need and Desirability in the Age of the Climate Crisis and Nature Crisis

168. Regulation 18 of the EIA Regulations requires that, when considering an application the competent authority must have regard to section 24O and 24(4) of the Act, the need for and desirability of the undertaking of the proposed activity, the requirements of these Regulations, any protocol or minimum information requirements relevant to the application as identified and gazetted by the Minister in a government notice or any relevant guideline published in terms of section 24J of the Act.

169. Section 24O of NEMA mandates that any guidelines, departmental policies, and environmental management instruments that have been adopted in the prescribed manner by the Minister and any other information in the possession of the competent authority that are relevant to the application; and any information and maps compiled in terms of section 24(3), including any prescribed environmental management frameworks, to the extent that such information, maps and frameworks are relevant to the application must be taken into account when considering applications.

170. According the DFFE's own guidelines, "need and desirability" is determined by "considering the broader community's needs and interests as reflected in a credible IDP, SDF and EMF for the are.a, and as determined by the EIA."[31]

171. The EIA Regulations appendices specify that the scoping report and environmental impact report (S&EIR)[32] must provide a motivation for the need and desirability of the proposed project and that interested and affected parties must be afforded an opportunity to make representation in terms of their views in terms of the need and desirability considerations.

172. The consideration of "need and desirability" in EIA decision-making therefore requires the consideration of the strategic context of the development proposal along with the broader societal needs and the public interest.

173. The government decision-makers, together with the environmental assessment practitioners and planners, are therefore accountable to the public and must serve their social, economic and ecological needs equitably.

[31] https://www.dffe.gov.za/sites/default/files/legislations/needanddesirabilityguideline2017_0.pdf, page 4.
[32] Regulations appendix1 (3) (f), appendix2 (2) (f), appendix3 3(f) of Government Notice No. R. 982 of 04 December 2014.

Failure to consider the Climate Crisis

174. The initial EIA process was premised on the development of the Musina Makhado Special Economic Zone in an area comprising 8 000 hectares of "pristine bush" (including 177 ha of Limpopo Ridge Bushveld, 4 422.2 ha of Musina Mopane Bushveld and 145 ha of Riparian vegetation) with numerous industrial projects being part of the site, including a 3 300MW coal fired power station; and coking coal; carbon steel; pig iron; ferrochromium; ferromanganese; silicon-manganese and calcium carbide plants.

175. Compared to the initial process, it now states that currently the best available energy sources are regarded as a *combination between renewable energy (for future administration buildings) and a scaled down independent coal fired power plant* (for future industries for 24/7 power supply) but that a separate EIA be undertaken for it due to the fact that establishment of power generating facilities exceeding 20MW is a listed activity that should be undergo the EIA process and authorised prior commencement.

176. However, elsewhere the EIAR confirms that the applicant has investigated sources of electricity in the Energy Analysis information report (Appendix S) and that the proposal for a clean *coal-fired power station should be the last resort* in the planning and development of supply of energy to the MMSEZ South Site.

177. It should only be considered if standards set out by the Air Quality and Climate Change specialists can be mitigated and maintained, and the EAP agrees with these findings. These include, as indicated by the Climate Change Specialist,

carbon capturing and filters and certain limits for the power and manufacturing and smelter plants to be developed within the MMSEZ South Site.

178. The energy specialist report will need to be updated once industry specific EIA applications are submitted to the decision maker. These reports have not been submitted.

179. The EIAR confirms that the proposed development will prepare the site for future industrial developments and as the developments will trigger listed activities in terms of the EIA Regulations of 2014, as amended, each developer will be required to undertake a stand-alone EIA.

180. The EIAR recommends that at least the following studies will need to be updated once EA is sought for the various future industrial developments on the site:[33]

180.1. Energy: A comprehensive specialist assessment of available energy sources for the further development of the MMSEZ South site.

180.2. Air Quality: Acid Rain impact once the MMSEZ South site is in operation on food security and agricultural sector.

180.3. Waste: An assessment for the need and construction of a future industrial waste dump.

180.4. Water: Feedback on the feasibility study on water from Zimbabwe from DWS and feedback on the water feasibility study on the offtake dam [from the Limpopo River] to be constructed in the Sand River.

[33] Page 918

181. The EA records on page 9 with reference to the Specialist Climate Change Impact Assessment Report that EAs "*for the individual plants should only be granted if the emission intensities can be achieved*…." and "*any approval of the project should be conditional upon an overall water risk analysis of the region being conducted with specific reference to the proposed SEZ project*".

182. Energy, air, waste, food security, climate risk and water - these are all strategic issues that are fundamental to establishing the need and desirability of the project. To push these vital considerations out along an unclear timeframe is an unacceptable start to a project of this magnitude.

183. The decision maker itself records with reference to Need and Desirability[34] that "what the proposed development might look like will not be possible [sic] due to power shortages in the country". The splitting of the project to grant an EA for the clearance of vast swathes of vegetation etc. cannot be condoned when the need and desirability goes far beyond this for a project that is potentially completely unfeasible.

184. To add to the concern around the lack of assessment of need and desirability, on 2nd March 2022 the MMSEZ CEO Lelhogonolo Masoga announced publicly that plans to build a coal-fired power plant to provide electricity for the hub's proposed steel, coking and pig iron plants "had been ditched." Masoga said: "*Environmentalists said no. World leaders said no – [saying instead] let's reduce our carbon footprint and stop producing energy through coal … we have abandoned that part of the project. We are now focusing on solar*."

[34] Page 13 of the EA

185. LEDET failed to consider the specialist Climate Change Assessment Report or the Energy Impact Assessment. Had it done so, it would have noted that the climate change, including its emissions inventory impacts are rated “extremely high” even after mitigation, and mitigation of the climate change impact is not possible without eliminating the coal-fired power station from the project. The Energy Impact Assessment makes it clear that solar PV power generation for this extremely energy-intensive industry on the scale planned is not feasible as a baseload supply “*due to space, reliability and high cost for battery storage*”. The conclusions in the Environmental Authorisation are therefore not rationally connected to the information before it and are therefore unreasonable and irrational.

186. It is important to note in the context of climate impact and its mitigation that even in the absence of coal-fuelled power generation, the project cannot be de-carbonised and will have a significant impact on South Africa’s cumulative emissions regardless of the power source. Coal is a primary input in steel manufacture and proximity to the coal deposits of the Soutpansberg and Limpopo Valley coalfield is repeatedly given as the economic rationale for steel manufacturing as the SEZ’s primary activity. According to the EAIR and several appended specialist reports including the above-cited Climate Change Assessment, of the (crudely) estimated greenhouse gas (GHG) emissions, of 53Million tons per annum of CO_{2e} the power plant accounts for only 20Mtpa.

187. The consideration of “need and desirability” in EIA decision-making also requires the consideration of how the activity’s impact on the ecological integrity of the area will affect South Africa’s global and international responsibilities relating to the environment. In the case of the MMSEZ South

Site, this includes the commitments South Africa has made as a signatory to the United Nations Framework Convention on Climate Change (UNFCCC).

188. The EIAR recognises the relevance of this convention, amongst others, in Section 4.3 in which the "Legislation and Guidelines Pertinent to this EIA" are identified. However, it is defective in its failure to take the climate change specialist findings on the impact of the MMSEZ South Site on international responsibilities any further than simply including them in Section 6 of the EIAR. These significant findings should have been included in the impact summary and in the EAP's conclusions and recommendations which are given weight in the evaluation of the application and the ultimate decision made.

189. This defect in the EIAR is particularly significant because of the climate change specialist's findings in respect of the MMSEZ South Site project's greenhouse gas emissions:

> South *Africa submitted their Nationally Determined Contribution (NDC) in response to the Paris Agreement in 2015 and outlines the national emissions trajectory up to 2050. South Africa's national emissions are expected to peak between 2020 and 2025, plateau for approximately a decade and decline thereafter in absolute terms. <u>The MMSEZ South site project alone will contribute 6% - 10% of the emissions proposed in South Africa's PPD that was used to inform the NDC, thereby significantly altering the national GHG trajectory that has been published and committed to.</u>*
>
> The *IRP Draft Update 201881 makes allowance for two additional coal power stations to be commissioned. These stations are already*

in the planning stages. The power plant planned as part of the MMSEZ South site development would therefore require a Ministerial Determination before construction can begin. The update to the IRP aims to reduce the emissions of South Africa's electricity generation sector by reducing the use of emission intensive technologies such as coal power stations. The addition of the power plant at MMSEZ South site would counter the objective of South Africa to reduce its emissions as a result of coal fired power generation.

190. Based on the above, it is impossible for the need and desirability aspect of the project to have been adequately assessed and the issues detailed above are too serious to ignore. The decision should be reviewed on this basis alone.

191. According to the United Nations Environment Programme (UNEP), we are facing a Nature crisis[35], in which "we are experiencing a dangerous decline in nature and humans are causing it".

192. The EIAR, in Section 7.4, rates the overall impact of the MMSEZ South Site Project on biodiversity as being of "negative high" significance, even after mitigation measures are applied. This is a function of both the magnitude of vegetation clearance and disturbance as well as the sensitive ratings of the vegetation itself and the other biodiversity it supports.

193. The EAP, in concluding on the desirability of the site clearance right at the end of the EIAR in Section 7.9.1, states that the negative impacts "may likely" outweigh the positive impacts that have been identified:

[35] https://www.unep.org/facts-about-nature-crisis

The outcomes of this EIA study aimed to protect the ecologically sensitive areas and support sustainable development and the use of natural resources, whilst promoting justifiable socio-economic development in the towns nearest to the project site. However, should site clearance be granted authorisation, the entire site and its surrounding will be negatively impacted upon as indicated by 18 out of the 21 specialist studies. Thus, the potential negative impacts of the proposed development on the natural, cultural, palaeontological, and agricultural environment of the site may likely, outweigh the identified positive impacts associated with the Very-High social and economic development benefits after applying mitigation measures.

194. The EAP goes on in the next paragraph to give his opinion specifically on the impacts on biodiversity:

It is the EAP's opinion that the disturbance of ecosystems and loss of biological diversity cannot be avoided. It can only marginally be minimised on the site and cannot be mitigated through a successful offset as per the biodiversity offset framework. As per the Biodiversity Offset report "Considering the complex nature of biodiversity offset programmes and their desired targets in terms of conservation, ecological status, and functionality, as well as the extent of the impacts and size of the area required for offsetting, it remains uncertain whether the MMSEZ South Site offset programme will meet its desired objectives of achieving "net gain". Due to time constraints the biodiversity offset report did not investigate the possibility of providing significant financial

compensation/contributions to nature conservation as an offset alternative. However, the disturbance and loss at site still will remain.

195. LEDET does not record in the EA that it considered the findings of the ecological assessment or the EAP's opinion on the desirability of site clearance as part of its "Reasons for the Decision". This is telling as it is inconceivable for the competent authority to have considered this information on biodiversity impacts, and still have made the decision to grant EA. There are thus two scenarios: if LEDET considered this information but simply failed to record it as part of the reasons, the decision to grant EA is irrational; alternatively LEDET's failure to consider this highly relevant information pertaining to biodiversity impacts renders the decision fatally flawed.

196. Further, and as already explained in the preceding section, the consideration of "need and desirability" in EIA decision-making requires the consideration of how the activity's impact on the ecological integrity of the area will affect South Africa's global and international responsibilities relating to the environment. In the case of biodiversity, this includes the commitments South Africa has made as a signatory to the Convention on Biological Diversity.

197. While the EIAR includes this Convention in its list in Section 4.3 "Legislation and Guidelines Pertinent to this EIA", the EIAR is completely silent on how the clearance of such a large area of indigenous vegetation, which cannot be avoided and which will be of high negative significance even after mitigation, will affect South Africa's commitments in terms of the Convention on Biological Diversity.

198. There is also a failure in the EIA process, and thus the EIAR, to adequately assess the compatibility of the MMSEZ South Site project in terms of the various biodiversity plans. This is another crucial part of determining the need and desirability of the project, specifically in terms of securing ecological sustainable development and use of natural resources, which was overlooked in deciding the application for EA, and which is discussed in more detail further on in this affidavit.

199. Based on the above, the same conclusion can be reached in this regard as for climate change - it is impossible for the need and desirability aspect of the project to have been adequately assessed. The decision should be reviewed on this basis alone.

Significant Adverse Impact on Water Access and Quality

200. The inter-related environmental and developmental challenges of the region are a common feature across the multiple planning frameworks applicable to the Vhembe District and the Limpopo Province, all of which systematically emphasise serious water security concerns stemming from mis-management of extremely limited water resources in the Limpopo Water Management Area (WMA).

201. According to the Department of Water (DWS) 2017 Limpopo North WMA Reconciliation Strategy (LNRS), a key planning instrument in integrated water resource management which seeks to balance demand for water resources with supply over an extended planning horizon (2010-2040), several catchments, including the Sand and Nzhelele River catchments where the MMSEZ is located, are in already in deficit, even in the acknowledged

absence of provision for the Ecological component Reserve as contemplated in the National Water Act, No. 36 of 1998, which is critical to the sustainability of the water system.

202. According to the LNRS and other sources, a combination of factors is contributing to the intensifying distress in several catchments, ranging from reduced catchment yields due to inappropriate and incompatible land uses in key water source areas, including aforestation in the high-rainfall, upper reaches of catchments, coupled with high rates of unregulated surface water abstraction for smallholder irrigation schemes in these areas; an over-allocated and over-developed large-scale irrigation sector; unsustainably high rates of abstraction of groundwater resources in lower reaches, particularly in the Sand River and Limpopo mainstem (both alluvial aquifers and surface water) largely to support the expansion of irrigation; deteriorating water quality from pollution, particularly from agro-chemical determinants; underlaid by chronic institutional capacity deficiencies and worsening climatic conditions related to drought severity and frequency, as well as the recurrence of heavy flooding events[36]

203. The overall quality of service delivery in the Vhembe District is worryingly poor, in particular the quantity and quality of water service:

203.1. Vhembe District Municipality's "Blue Drop" performance is declining according to its 2020-2021 Integrated Development Plan (IDP)[37].

[36] DWS. (2017) *Limpopo Water Management Area North Reconciliation Strategy - Final Report - # P WMA 01/000/00/02914/11B.* Department of Water and Sanitation and Limpopo Environmental Outlook Report at p13;
[37] Vhembe IDP 2020/2021 at p65: DWS Blue Drop Certification Programme - Vhembe District Municipality performance rating in 2014 was disappointingly poor, and represented a considerable decline compared to 2012. No report released since.

203.2. Water shortages in the Vhembe District's towns and across many villages have become acute. According to the detailed analyses undertaken for the LNRS, as of 2010, a major imbalance already existed in the Nzhelele and Sand River catchments, suffered exclusively by domestic water users concentrated in the small urban centres and villages (large-scale commercial irrigators' requirements were still met and mining and industry at that time did not exist). It is unsurprising therefore that ever worsening water shortages led to violent protests in the town of Musina in May of this year[38].

204. The region, additionally, 'has water demand management challenges and a great need exists for the implementation of Water Demand Management and Water Conservation projects'.

205. The vast number of problems identified seem ultimately to be institutional in nature. The National Department of Water and Sanitation's broad failure to give effect to the principles of democratised water governance enshrined in the Water Act of 1999 extends to the Limpopo Water Management Area: No Catchment Management Agency has ever been established, no strategy for the WMA has been developed and nor has the fundamental principle of the Reserve been applied as required by the Act. At the level of the LM, staff members of Vhembe DM are still on the DWA payroll, resulting in a spirit of poor accountability and lack of direction. Compounded by the lack of an organisational structure, the municipality seems to find itself plagued by worker dissatisfaction and confused roles and employers.

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38 https://www.news24.com/news24/southafrica/news/residents-of-musina-bring-town-to-standstill-in-protest-over-water-20220513

206. In sum, a significant human population and regional economy depends on the Limpopo River and its tributaries, yet many of these rivers are becoming heavily polluted and their resilience seriously compromised through over-exploitation.[39]

207. In this already distressed situation, the hugely disproportionate water demands of the emergent mining and industrial sectors will impose dangerous strain, as the contortions of the 2017 LNRS balancing equations make plain: In order to meet the projected water requirements of the planned Greater Soutpansberg Projects (GSP) coal mines and Musina SEZ at it was then conceived, an elaborate and highly implausible inward transfer scheme to augment water supply from other catchments, including from Zimbabwe's Zhove Dam on the Umzingwane Rive, is proposed.

208. It is important to note that the grossly irresponsible reconciliation strategy contained in LNRS, which fails entirely to reconcile available water resources with the additional projected demand from planned coal mining and industrial development, and instead exposes the Sand and Nzhelele catchments to serious deficits leaving all water users dependent upon it intensely vulnerable, in fact pre-dates the MMSEZ and does not factor in its projected water requirements, which dwarf those projected from all sectors combined.

209. It is not only the region's water sources that are under pressure, its natural capital in entirety and its cultural heritage are also under growing threat.

210. A consistent lack of provincial and local government focus has undermined the development of tourism and the wildlife economy, which have significant

[39] LNRS 2017 and Vhembe IDP 2020/2021.

growth potential in the region and an unrivalled capacity to generate low-skilled job opportunities in rural areas, support local SMMEs across the value chain and on community-owned land, as well as earn foreign currency for relatively little capital investment. According to the Limpopo Protected Areas Expansion Strategy (LPAES) Making-The-Case Technical Report (incorporated by reference into LEDET's Limpopo Conservation Plan), 'Rand-for-Rand investment in the tourism industry is 40x more efficient at creating jobs and 10x more efficient at earning forex than the mining sector'. These sectors depend critically on the (and the expansion of the protected areas network on which both depend and fundamentally on the preservation of the landscape in a natural state. Haphazard and uncontrolled development in the region has led to a gradual loss of high-biodiversity land with its harmful effect on wildlife, wildlife tourism and the broader wildlife economy, while the potential of heritage and cultural tourism, both emerging tourism markets globally, is also being squandered as largely unprotected heritage sites are being degraded throughout the entire district.

211. The recently updated regional planning framework collectively recognises how culturally rich and biodiverse the region remains, admits that the systems are under severe pressure and urges intervention to ensure conservation and formal protection.

212. In this context, a prioritisation of mining and industrial development despite the natural constraints, particularly in terms of water resources needed to support the development of these thirsty sectors in a water-scarce region, and the high cost of their development to the comparatively higher value of the natural capital is grossly irresponsible.

213. The MMSEZ as a large-scale fossil-fuel, specifically coal-based noxious industrial development that is extremely water-intensive, represents incompatible land and water use in conflict with integrated spatial, land-use and water planning of an altogether different order, and will amongst its other serious adverse environmental, social and economic impacts, seriously jeopardise the water security of the region and fundamentally violates the principle of the Reserve.

214. The EAP recommends that any approval of the project be conditional upon an overall water risk analysis of the Limpopo region being conducted, with specific reference to the proposed MMSEZ South site project, in order to identify the broader water stress and possible pollution risks posed by the proposed MMSEZ South Site, which will be exacerbated by the impacts of climate change in the province.

215. At page 481 of the EIAR, the EAP specifically states that:

> *It is advised that a regional perspective be developed with regards to water resources in the province, current land use change patterns, existing water uses and climate change. This will allow for more informed decision-making related to the development of the proposed MMSEZ South site.*

216. Once again, this consideration in itself, when applying the precautionary principles contained in NEMA, ought to have prevented the granting of EA. The EA itself confirms that water resources and electricity supply will be a challenge and that there are ‘serious environmental costs to the project’. In an irrational non-sequitur conclusion, however, it states that ‘with mitigation the economic benefits will surpass the environmental costs’.

The MMSEZ will exacerbate the water issues in the area

217. The Limpopo (North) WMA catchments simply cannot accommodate the demands of the MMSEZ. To give an indication, according to the appended statement by independent expert, Dr Victor Munnik attached here as "FA 7":

> *"figures [that] were given in the LEDET August 2019 "final scoping report", [state that] the MMSEZ would require 123 Mm3 per year in operational phase. For the 9-year construction phase, it would require 13.9 Mm3 per year. (p. 60).The locally available ground water on site is limited to 0.377 million m3 per year – a small fraction of what is needed".*[40]

218. According to the Integrated Water Services Report for the Musina-Makhado SEZ, the specialist report produced by Matukane and Associates in August 2020 for the EIA, the North and South Sites will have a combined annual water requirement of 110 Mm^3 during their operational phase, with the metallurgical zone requiring 80 Mm^3 of that amount[41].

219. The Internal Masterplan for the development (which cites unavailable water studies) projects that "water demand for the MMSEZ as well as new mines in the area and the growth of the two municipalities involved" will amount to 133 Mn3/a by 2040[42].

220. The plan contained in the Matukane Report to meet this requirement comprises:

[40] Victor Munnik " Expert statement on the water requirements of the proposed MMSEZ and the likely impact of such requirements on other water users in the relevant catchment" at p8.
[41] Matukane and Associates, 2020, p. 17
[42] iX engineers (Pty) Ltd, MCC and Hoimor, 2019, pp. 22 - s7.2.2 Water Demand

220.1. (initial) groundwater abstraction at both the MM-SEZ South Site (Makhado) and North Site (Musina) including 20 Mn^3/a from the Limpopo alluvial aquifer;

220.2. abstraction from the Limpopo River via the so-called Musina Dam complex, consisting of a weir in the Limpopo mainstem just downstream of Beit Bridge and a series of two "off- channel" dams at the confluence with the Sand River with an anticipated yield of 180 Mm^3/a and 200 Mn^3/a respectively, which is intended to provide 90% of the water requirements in the long-term;

220.3. supplemented by the previously mentioned Zimbabwe Zhove Dam scheme supplying an additional 30 Mm^3/a[43].

221. According to the 2021 Musina Dam Pre-Feasibility Study report, the weir in the Limpopo mainstem will enable abstraction of **60%** of the Limpopo's estimated annual flow[44].

221.1. This conflicts with the earlier claim made in the Matukane Report that "approximately **20%** of flood water will be retained and pumped from the river, thus still allowing downstream users to exercise their rights"[45].

221.2. The pre-feasibility study report instead merely lists "Reduced flow in the Limpopo River resulting in negative impact on downstream users and on EFR" (Ecological Flow Requirement) as an impact of the fact that "Approximately 60% of the flood water (calculated from the MAR

[43] Matukane and Associates, 2020, pp. 25 - s10 Specific Supply Plan
[44] Sunfrica, 2021, p. 83
[45] Matukane and Associates, 2020, p. 22

at Beitbridge) in the Limpopo River will be abstracted and pumped to the Musina and Sand River dams."[46]

222. The Matukane report makes only hesitant concessions about the highly questionable feasibility of these plans to meet these vast water requirements and the risks they pose, but expressly acknowledges the misalignment and conflicts with the LNRS (referred to as DWS-LRS):

"Forecasts were based upon information available at the time. In the DWS-LRS, the industrial water requirement for the MM SEZ was set at around 11 million cubic meters per annum. According to current planning, the real expected requirement is much higher at a long-term demand of 80 million cubic meters per annum. This calls for additional detail and planning adjustment.

8.1.5.2. Musina Local Municipal Area

The water requirements associated with the current industrial planning of the MM SEZ exceed the anticipated requirements substantially. This warrants a complete review of water requirements over the given time horizon, as well as a reconsideration of sources compared to the planning presented in the DWS-LRS."[47]

223. The aforementioned specialist report on climate impact assessment for the EIA states that:

"Water is of critical concern. The study area is already severely water stressed and climatic modelling for the area indicates increased ambient

[46] Sunfrica, 2021, p. 123
[47] Matukane and Associates, 2020, p. 16

temperatures, prolonged periods of drought and greater rainfall variability. These factors will exacerbate current water risks, both in South Africa and in neighbouring Zimbabwe".

Page 3 of the report is attached as "FA 8".

224. With due consideration of the aforegoing, I am convinced by the findings and conclusions of the series of independent research reports commissioned by the Friedrich Ebert Stiftung authored by Dr Munnik, which examine the impact of the plans to meet the projected water requirements of MMSEZ on water resources and water users in the Limpopo WMA in the context of the water politics in the region, which state that[48]:

" …in the absence of water governance for this catchment, as mandated by the Water Act of 1998, a vacuum is created in which high risk ideas such as the EMSEZ and the Musina Dam can and do flourish.

…The insistence that water will be found for a fossil fuel project in defiance of climate change requirements to sharply ramp down coal use, and to find that water in a closed catchment – that is, a catchment in which all water resources are already allocated – are both the results of typical mega-project planning that ignores local conditions and strives to overcome natural constraints by bending nature to the developers' will (Flyvbjerg 2013; 2014).

…the risks that plans for the EMSEZ water supply hold for other water users in this water scarce catchment, are very real. In typical mega-project thinking, the developers insist that the constraints of nature can be

[48] Munnik, Water for the EMSEZ Megaproject at any cost: A report into the absence of water governance in the Limpopo WMA, 2021

overcome, and that there is a water solution to the water demands of the EMSEZ, however unlikely these may be.

…In light of the lack of feasibility of the plans above, it is highly likely that current water users will be prejudiced if any of the EMSEZ plans are set in motion."

225. In his research report and statement Dr Munnik rightfully points to the fact that the risks and impact will be disproportionately borne, and submits that:

"The risk is greatest for the 'diffuse water users', the majority of people in the area, consisting mostly of poor rural, typically female-headed households residing in ex-Bantustan areas, dependent on groundwater, which can disappear, as it did in Mudimeli, with even small disturbances to a groundwater level. It also includes irrigation farmers, small and large scale, who produce food and provide jobs, and are important to the national economy.

For the "invisible water users" practising subsistence agriculture, whose "water use is too low, per capita, to show up in water planning documents", Dr Munnik suggests that "…any pressure on water resources will impact on them first and have drastic results".

226. In addition to the water security impacts discussed above, I am convinced that Dr Munnik's assessment that the quality of water would also be severely adversely affected is correct. Dr Munnik's expertise on the subject is well documented and he has researched and published extensively over the course of two decades on the impact of steel mills, coal mining and coal-fired

power stations including their water and other environmental and social impacts.

Failure to consider the various spatial and developmental planning mechanisms

227. For the proposed MMSEZ to be deemed appropriate, the applicant for EA must, according to environmental regulations, have considered the developmental and spatial plans mentioned below, and to have considered and found the proposal compatible with the agreed economic growth path they articulate.

228. These plans are the product of extensive stakeholder engagement processes and can be considered to represent both the state's and surrounding communities' collective vision for the future of the area. The failure to meaningfully consider these spatial development and environmental management plans, is thus not only unlawful but constitutes the breach of collective agreement, leading to significant land-use conflicts and socially and ecologically incompatible and harmful regional development.[49] The area is clearly highly sensitive from an ecological standpoint, has vulnerable features that are protected, and has environmental elements that have been identified as being important enough to significantly influence land-use planning. The spatial and environmental plans are clear in this regard, yet the regulator has not taken these features into consideration when making the decision on the acceptability of the MMSEZ.

Context

[49] S6 (2) (e) (iii) of PAJA outlines the failure to take into account relevant considerations. Moreover, the NEMA framework places a positive obligation on the state to plan reasonably, rationally and responsibly in the management and sustainable usage of ecological resources and associated infrastructure. In terms of NEMA definition of sustainable development in Section 2, 'planning' forms a central part of the understanding of the principle.

229. A significant and strategic element of contemporary South African planning frameworks is the adoption of the principle of 'integrated development planning' which affords local government wide-ranging local economic development-related powers and obligations to fulfil its constitutional mandate.[50] In order to operationalise this principle, a need arose for practical instruments to ensure developmental coordination. This paved the way for IDPs and the inclusion of SDFs.

230. All proposed development must consider the various spatial and developmental planning mechanisms that are designed for a designated local, district and provincial areas. These planning tools inform all developmental applications and are integral to integrated development. Local government has the constitutional mandate to drive local economic development and the IDPs from the 5-year plan for the particular municipality, with the SDF accompanying the plan as the spatial representation of the IDPs planned priorities. Various environmental spatial planning tools are also then overlaid into these plans to provide detailed representations of the ecological attributes of particular region, these include, inter alia, EMFs, Bioregional Plans, Biosphere Reserves and municipal EMPs.

231. Local and district municipalities bear the responsibility to formulate and implement IDPs, apportioning them legal status, superseding all intersecting plans that concern development within local government. The IDPs thus carry significant weight within the local developmental planning metric, as they reflect the vision for 'development of the municipality, with special emphasis on the most critical development and internal transformation needs'.[51]

[50] S44 of the Constitution, refer to Schedule 4 and 5 for government competences.
[51] S26(c) of the MSA.

232. Importantly, the MSA has self-imposed environmental obligations, committing to provide services in an environmentally sustainable manner. The Court in *Le Sueur and Another v Ethekwini Municipality* confirmed that an explicit municipal duty exists to ensure that environmentally-sensitive land is protected and conserved.[52]

233. However, on a local level the most important integration must occur between the municipal IDPs and SDFs, as these instruments are integral to fulfilling the local integrated planning function. The spatial analysis section of the IDP provides the existing spatial pattern, growth points and population concentrations that have emerged in the municipal area; while spatial detail, challenges and opportunities is contained in the SDF. The spatial future of an area is based on the collective decisions regarding land-use, characteristics, and developmental drivers of the area.

234. In granting Environmental Authorisation for the MMSEZ South Site, the subject of this review application, LEDET as the decision-maker has patently not adequately considered the IDPs and SDFs, and has not recognised the conflict that exists between this high-impact development and prescribed sustainable development principles. The mode of development being pursued in this highly sensitive area under the auspices of the MMSEZ will result in a destructive growth path that will result in a deteriorated environmental base from which no sustainable economic future can be realised.

Incompatibility

[52] The responsibility of environmentally conscious planning and protection is therefore a core obligation of local government, even though the 'environment' is not an explicit functional competency, municipal planning must recognise the s24 right to environmental health and wellbeing, see s23(1)(c) of the MSA.

VHEMBE BIOREGIONAL PLAN

235. The Vhembe Bioregional Plan (VBP) and its history are discussed in-depth in the spatial planning report but will be summarised briefly here. The VBP is attached as "FA 9".

236. A bioregional plan is a legislated spatial planning tool to assist in the management and conservation of South Africa's biological diversity, based on a systematic biodiversity planning, mapping of priority areas, and attributing specific land and resource-use guidelines to specified areas.[53]

237. The broad purpose of any bioregional plan is to act as the primary biodiversity platform informing land-use planning, environmental assessment and authorisations, and natural resource management, by a range of sectors whose policies and decisions impact on biodiversity.[54]

238. The VBP drafted in 2017 is the first plan of its kind for the Vhembe district, covering the entire region, which includes the Musina, Makhado, Thulamela and Collins Chabane local municipalities. As intended, it provides the yardstick against which to screen proposed developments by providing insight into the sensitivities of the proposed host area.

239. Given the importance of bioregional plans to sustainable development, the Limpopo Provincial Government has compiled a bioregional plan for each of its five districts. The bioregional plans for four of the five districts have been published.

[53] Published by the Minister or MEC in terms of s 40 (2) of the NEM: BA of the Vhembe region. Ibid 4.
[54] Limpopo Department of Economic Development, Environment and Tourism 'Vhembe District Bioregional Plan' (December 2017) vii.

240. The VBP was approved by the Department of Environmental Affairs in 2018 and on 30 August 2019 LEDET published the notice below of its “Intention to Publish (the Vhembe) Bioregional Plan under Section 47(2) and Section 100(1) of the National Environment Management: Biodiversity Act 10 of 2004” and calling for public comment.

241. Three years later, the plan has not been published and no reasons have been forthcoming. All district Bioregional Plans in Limpopo have been gazetted, barring that of the Vhembe. We call upon the Respondents to explain to the Court why the VBP has not been gazetted to date.

242. It should be noted that the MMSEZ falls largely within the areas designated in the bioregional plan as “Critical Biodiversity Areas 1 and 2" (CBA 1 and CBA 2) as well as within “Ecological Support Areas 1 and 2” (ESA 1 and ESA 2) and that the VBP maps the misalignment and expressly cites the SEZ, given its planned activities, and associated coal mines, as being in conflict with the land uses prescribed for such biodiverse areas.

243. Critical Biodiversity Areas are areas required to meet biodiversity targets for ecosystems, species and ecological processes, as identified in a systematic biodiversity plan. Ecological Support Areas are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of Critical Biodiversity Areas and/or in delivering ecosystem services. The primary purpose of a map of Critical Biodiversity Areas and Ecological Support Areas is to guide decision-making about where best to locate development. It should inform land-use planning, environmental assessment and authorisations, and natural resource management, by a range of sectors whose policies and decisions impact on biodiversity. It is the

biodiversity sector's input into multi-sectoral planning and decision-making processes.

244. The Land Management Objectives for both CBA 1 and CBA 2 designated sites indicate that the authority should maintain the area in a natural state with limited or no biodiversity loss.

245. The MMSEZ will result in substantial biodiversity loss in both CBA 1 and CBA2-classified areas.

246. The 2017 VBP further recommends that such areas 'obtain formal conservation protection' and appropriate zoning be implemented 'to avoid loss of intact habitat or intensification of land use.'

247. This is clearly in direct contradiction to the heavy industrial mega-development that is the MMSEZ.

LIMPOPO CONSERVATION PLAN

248. The Limpopo Conservation Plan (C-Plan) provides an integrated biodiversity sector input layer to multi-sectoral decision-making processes for the Limpopo Province.

249. The 2013 C-Plan is a revision of the 2009 C-Plan plan that uses quantitative systematic spatial biodiversity planning methodology, conforming to the bioregional planning guidelines.

250. The C-Plan incorporates the CBA map and uses it as a central determining factor in the classification of sensitive areas targeted for protection. The Limpopo CBA map was updated in 2018. The C-Plan also recommends that

the district CBA map and guidelines be used in conjunction with existing municipal management schemes as the minimum environmental input to any strategic plan or land-use planning decision. The CBA map is attached as “FA 10”.

251. The conservation planning approach adopts a systematic and detailed data-driven province-wide planning process that is spatially-focused and represents the minimum area necessary to maintain the biodiversity pattern and ecological processes in the landscape.

252. The focus on NEMA principles guide the formulation of the C-Plan. There is also a protected area focus, with expansion, assessment and analysis seen as central facets to the plan.

253. Importantly, section 2(r) of NEMA provides that sensitive, vulnerable, highly dynamic or stressed ecosystems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.

254. The C-Plan acts as the bioregional plan for the Limpopo Province and aims to support the sustainable management of unprotected priority areas, aligning the methods and terminology of the plan with the national guidelines for the development of bioregional plans.

255. The C-Plan is sectorally conscious, both in its construction and operation. As part of the methodology of its construction, the C-Plan integrates all relevant pre-existing spatial biodiversity plans (including neighbouring C-Plans). Operationally the plan feeds into a range of multi-sectoral planning and assessment processes such as Environmental Management Frameworks

(EMFs), Spatial Development Frameworks (SDFs), Strategic Environmental Assessments (SEAs), EIAs, biosphere reserves, and to support and streamline environmental decision-making.

256. The sensitivity analysis methodology references two primary products, namely, the CBA map and associated land-use guidelines. The sites identified in the plan are assigned to CBA categories based on their biodiversity characteristics, spatial configuration, and requirement for meeting targets for both biodiversity patterns and ecological processes.

257. The CBA categories that stem from these primary products are described in detail and feature prominently in the sensitivity analysis. The C-Plan identifies three biodiversity categories of CBAs, from the most sensitive to the least. These include: 'protected areas'; 'CBA 1' areas which are considered irreplaceable; and 'CBA 2' areas where conservation is optional but highly desirable.

258. A central aim of the CBA map is to identify a network of areas, which if managed according to the land-use guidelines would meet the pattern targets for all important biodiversity features, while at the same time ensuring the areas for supporting necessary ecological processes remain functional.

259. The evaluation methodology used in the National Biodiversity Assessment (NBA) was mirrored in this C-Plan assessment to create alignment between the sectoral plans.

260. The CBA map connects the land-use guideline graphs which are based on a combination of environmental and sectoral plans from the Mpumalanga and Gauteng provinces.

261. As noted in the C-Plan, these guidelines and recommendations are aimed at informing strategic decision-making and facilitating biodiversity conservation in priority areas outside the protected area network.

262. The C-Plan prides itself on basing its conclusions and targets on up-to-date and relevant contextually sound data, and an explicit set of biodiversity conservation targets (not protected area targets) necessary to maintain ecologically functional landscapes. Specifically, the CBA Map contains categories and classifications in a table form. The categories include land management objectives; land management recommendations; compatible land use; and incompatible land use that corresponds with the CBA Map categories.

263. The C-Plan does not supersede, obstruct or substitute any legislatively required site-specific environmental assessment, such as EIAs and EMPs, but rather intends to provide a compatibility guide for land-use through the provision of biodiversity management objectives of each CBA map category.

264. The guidance presented in the C-Plan is, therefore, an additional tool to be used in addition to existing provincial or municipal spatial and environmental management tools. The multi-sectoral nature and detailed data-driven guidelines of the C-Plan makes it perfect to be superimposed onto future planning instruments.

265. The MMSEZ site overlaps with CBA1 and 2-classified areas specified in the C-Plan (as the mapped in the VBP discussed above) and is in close proximity to several protected areas.

266. The Environmental Authorisation for the MMSEZ South Site that is the subject of this review application, was thus granted despite available information on the incompatibility of the proposed metallurgical zone with adopted spatial and other plans and policies, including the Limpopo C-Plan v2 and updated CBA maps, the attention drawn to same even in the EIAR, and in the objections raised to the project by numerous registered interested and affected parties recorded in the register of such comments. Despite these conflicts, the purported competent authority decided not only to issue an environmental authorisation but also to dismiss appeals to the decision brought on *inter alia* these grounds.

VHEMBE BIOSPHERE RESERVE ZONATION PLAN AND CONSERVATION STRATEGY

267. The Vhembe Biosphere Reserve (VBR) provides a birds-eye view of the characteristics and potential of the area through its zonation analysis.

268. The MMSEZ South site is of particular interest to the VBR as it is located in the Vhembe Biosphere Reserve. Based on the VBR's updated zonation plan, which is also incorporated into the VBP discussed above, the proposed site overlaps with core, buffer and transition zones that should support the development of sustainable activities, and several of the vassal coal mines that will be developed to supply the smelters similarly overlap with these high priority and sensitive areas.

269. The scale and industrial intensity of the MMSEZ guarantees the destruction of these sensitive areas and any compatible land-use activities being supported in the future.

270. The cumulative impact of the MMSEZ and the surrounding coal and other mines, power plants, dams and industrial developments supporting the MMSEZ, will alter the landscape for centuries to come, irreversibly degrading what is classified under a complex architecture of spatial and environmental plans as as highly-valuable, near-pristine area deserving of protection and sensitive management.

271. This consideration, when applying the precautionary principle contained in NEMA, ought to have been the single consideration weighing against the granting EA.

The Environmental Spatial Planning in the MMSEZ area incompatible with the Vhembe region – Dr Snyman's Evidence

272. The independent expert report prepared by Dr Louis Snyman attached here as "FA 11" illustrates the dangers of continuing with the construction of the MMSEZ in a region that was not spatially planned for it.

273. Dr Snyman states that:

"the Vhembe sub-region contains some of the most biodiverse and culturally sensitive areas of SA, such as the Northern Kruger National Park, Mapungubwe and other environmentally sensitive areas such as the Soutpansberg, Venetia and the Herd Reserve which are largely unprotected".

274. Dr Snyman's report largely focuses on the VBP, which is a plan that is based on systematic biodiversity planning, which includes mapping priority regions and assigning particular land and resource-use rules to each area. This Vhembe bioregional plan was created in 2017 and draws on the Limpopo C-Plan.

275. Dr Snyman warns that the MMSEZ will worsen the area's environmental and developmental difficulties which include ageing infrastructure; major water supply and quality concerns; droughts; recurring heavy flooding; pollution; wetlands destabilisation; and service delivery challenges.

276. Moreover, the industrial activities such as agriculture and mining are putting a growing strain on the limited accessible catchment areas which are critical to the livelihoods of the local economy, yet many of these rivers are heavily polluted. Additionally, “[t]he region has water demand management challenges and a great need exists for the implementation of water demand and conservation management projects’.

277. It is not just the region’s water sources that are under pressure, as the biodiversity and cultural resources are also under constant threat. This is primarily due to uncontrolled development activities and resource consumption which protrude into sensitive ecosystems negatively affecting the stability of the systems, impacting many endangered species.

278. It is concerning that while the “heavy industry presents a major concern in terms of pressing threats to water and biodiversity resources, yet this has not been stated as an issue”.

279. Dr Snyman further states that while “ there is an admission that both the local and district municipality have not yet undertaken a regional heritage survey; this is essential as the heritage information on record is very limited and the area possesses great cultural significance.

280. The district and local municipality do not have access to accurate developmental and environmental baseline information. The collection of

baseline information and the setting of thresholds and targets are explicitly referred to in the LDP.

281. Interestingly, targets are set in line with specific development plans for the three mega-conservation areas and the three centres of endemism within the province.

282. The LDP states that the provincial environmental authorities, in this case LEDET, must follow an 'Environmental Accumulative Study' approach. This approach aims not only to understand the impact of current developments, but also how these impacts relate to one another cumulatively".

Biodiversity as a strategic resource

283. The LDP, together with the district and local IDPs, all specify that environmental management is a central concern and strategic objective.

284. The environmental approach adopted by the IDP claims to be influenced by sustainable development and the management of ecosystem services. Sustainable development is presented as a core principle of the operation of the province and municipalities, and refers in multiple instances, to the balance that needs to be found between ecological stability and development.

285. In accordance with s 83(3)(d) of the MSA, a district municipality must seek to achieve the integrated, sustainable, and equitable social and economic development of its area as a whole by promoting the equitable distribution of resources between the local municipalities in its area to ensure appropriate levels of municipal services within the area.

286. The planning framework also directly links the reliance of communities on the stability and continual existence of the natural resources and functionality of ecosystem services. The recognition of how valuable ecosystem services extend to the identification of the RAMSAR wetlands and the appreciation of the specific function that wetlands have in the dry and arid area.

287. The biodiversity of the region is considered a strategic resource, as it provides rural communities with natural products which sustain their livelihoods, such as shelter, food, fuel and medicinal plants.[55]

288. The SDFs of both Musina and Vhembe reference the National Biodiversity Strategy and Action Plan (NBSAP) in detail, which requires local government 'to develop a plan of action for the conservation and sustainable use of the country's biological diversity'.[56]

289. The implications include ensuring that sensitive areas are mapped, and their on-going protection ensured. The provincial and district SDFs follow this directive and outline the environmental sensitivity classes identified for specific development sites on the maps. For each sensitivity classification there are specific explanatory notes giving an indication of development nodes and areas outside nodes.

290. The Limpopo SDF rationalises and promotes the optimal use of land and protection of natural resources by considering high and moderate potential agricultural areas, high and moderate environmental sensitivity areas and mining and mineral deposit areas, as well as other relevant factors.

[55] Vhembe IDP at 116.
[56] Vhembe SDF at 14.

291. Within each node of sensitivity, the preferred types of ecologically compatible development are provided, as stipulated in NEM: BA and NEM: PAA. For example, low sensitivity areas should be considered as preferred development areas inside development nodes compared to the area of moderate and high sensitivity.

292. The distinction made between sensitivity within developmental nodes and that of outside, sets thresholds for sensitivity, from high, to moderate, to low. This assists with the correct placement of proposed developments from a strategic perspective, these classifications are common amongst the SDFs.

293. The status of CBAs seems to permeate the local development planning documents, as the SDFs identify this classification as central to decision-making from a planning perspective. Areas such as river corridors and wetlands are prioritised for protection from urban, agricultural, and industrial activities.

294. The pressures on biodiversity are laid out clearly in VBP. These include agricultural expansion and human settlement expansion. The biggest threat to regional biodiversity within the Vhembe District Municipality is identified as new mining and industrial developments. Incompatible land-uses threaten to encroach on CBAs and ESAs alike, with multiple new applications for mining rights expected because of the MMSEZ successfully gaining the EA from the proposed project, steep biological decline is expected in the medium term.[57]

295. As already noted in the section on need and desirability, the failure to consider the compatibility of the MMSEZ South Site project in terms of biodiversity

[57] Vhembe Bioregional Plan at 12

planning for the area is not only a flaw in the EIA process, but also the EA itself, especially as impacts on biodiversity have been assessed to be of negative high significance, even after mitigation.

Vulnerability to Climate Change and the Need of a Low-Carbon Economy

296. Ecosystem-based adaptation and resilience are mentioned as a core principle in the LDP. The province and municipalities recognise that growing public awareness of the consequences of climate change and unconstrained consumption of the natural resources has led to a refocusing of political priorities towards the protection and rehabilitation of the region's natural assets.[58]

297. The LDP and the district IDP reinforce the NDPs stance on the transition to an environmentally sustainable low carbon future, which requires the 'decoupling of economic growth from natural resource degradation and depletion'. The NDP has identified outcomes such as that ecosystems must be sustained, and natural resources used efficiently through enhanced governance systems, capacity and sustainable human communities.

298. With the completed MMSEZ expected to contribute more than 10% of the country's carbon commitment, it cannot be said that the project falls within the vision of transitioning the region away from an extractive and carbon-intense future.

299. The IDPs commit to the decoupling of resource use and increasing investment in green sectors, so as not to expose future generations to significant environmental risks or ecological scarcities.

[58] NDP at 216.

300. The plans recognise the wealth of natural resources in the region, identifying resource over-exploitation and land degradation as central threats.[59] Taking the phased approach and the alignment with the NDP's sub-outcomes and actions into account, these plans seemingly only pay lip-service to the environmental concerns as the accelerated developmental drive is not aligned to these environmental objectives. All plans, except the LDP, are silent on the inherent conflict that exists between mining,[60] heavy industry, agriculture[61] and nature-based conservation related activities proposed in the area.

301. For example, the Vhembe IDP recognises that existing mining and its waste dumps are already responsible for terrestrial, hydrological and atmospheric pollution in the region. Poorly managed coal mines can leak methane into the atmosphere, and coal waste dumps contain materials that can burn on their own (self-combustion) and produce poisonous particles and gases.

302. The LDP does recognise that this focus on mining development could present a serious long-term risk due to the cyclical nature of the mining sector. The promotion of the diversification of the economy and multi-skilling of the workforce in an effort to mitigate these risks associated with commodity price dips and mine closures must be kept at the forefront of developmental decision-making.

303. However, this is not likely to impact the prevalence of extractive operations, given the focus on the sector and the need to invest, given the unemployment and poverty related concerns.

[59] Small Enterprise and Human Development, 2008.
[60] Vhembe IDP at 114.
[61] Agricultures impact on the environment, includes increased methane, air and soil pollution and water usage.

304. In response to these concerns, the LDP calls for all heavily industrialised areas to have strategic environmental frameworks, and every district and local municipality to have an EMP.

305. The LDP stresses the need for the provincial environmental authorities, in this case LEDET, to foster an 'Environmental Accumulative Study' approach, which takes a holistic and cumulative approach to impact.

306. It identifies that the three mega-conservation areas, Waterberg, Soutspanberg and the Drakensburg, and the three centres of endemism, Soutpansberg, Wolkberg and Sekhukhune, that exist in Limpopo should have specific development plans, yet there is no further direction is provided as to how these plans should be developed and within which legislation or framework. The Soutpansberg being one of the mega-conservation areas".

307. These plans are now completely unattainable with a mega industrial complex being planned in very close proximity to the Soutpansberg. Additionally, to our knowledge no 'Accumulative Study' has been undertaken to understand the cumulative impact of the existing and proposed projects for the region.

Land-Use Conflicts and Spatial Representation

308. The region has a vision to conserve the scenic and pristine settings contained in the sacred sites and important bio-diverse, catchments and landscapes of the Soutpansberg, Mapungubwe and Kruger National Parks.

309. The SDFs take a holistic and ecosystem-centred perspective, stating that impacts resulting in 'natural environmental processes and ecosystems functioning should be a priority. The Musina SDF in particular mentions that

endangered and vulnerable ecosystems are of utmost importance, with conservation, heritage and sense of place being the central principles of decision-making.

310. The SDFs encourage local governments to focus on the proximity of invasive development to vulnerable areas, minimising developmental footprints and providing alternatives that ensure the preservation of indigenous ecosystems and species.

311. Areas with extractive and industrial potential are highlighted in the SDF, however it is stated that due to the locality of the coal field between areas with agricultural activities and areas of biodiversity protection, great care should be taken in ensuring sustainability of the latter uses/activities.

312. Development of extractive and industrial activities should not prejudice any of the other land uses earmarked for this area, nor should it encroach on agricultural land and environmental protection areas.

313. The Vhembe SDF was prepared using the Ecological Socio-Economic Relationship (ESER) Framework. This framework is based on the principle that the relationship between economic efficiency, social justice and human well-being, and ecological integrity is not one of equal and overlapping spheres where losses in one area can be set off by enhancements in another. It directly connects these principles to the spatial component.

314. This ESER Framework recognises, firstly, that economic efficiency is wholly dependent on the quality of human resources and their capability to add to the economy. Secondly, economic activities and social development are wholly dependent on the availability of ecosystem services, yet they cannot demand

more from these services than they are able to deliver on a long-term sustainable basis.

315. The two clearly stated important regional planning considerations are highly valued mineral resources and areas of critical biodiversity. This poses difficulties in terms of conflicting developmental planning and imperatives. There is pressure on water resources and biodiversity, with agriculture and mining listed as the chief threats to environmental stability, with focus on pollution of soils and watercourses from fertilisers and mining-related air emissions.

316. The zoning of spaces for mega-conservation projects has been listed as a challenge. The proposed solution is to engage with contending land-users, such as agriculture, mining and settlement development agencies, to agree on how these areas can be zoned for protection and management.[62] Public-private institutional models are proposed for the development of these mega-conservation projects. This is an enormous project, with multiple interests, both personal and financial.

317. A broad capital-intensive environmental assessment and mass re-zoning proposal such as this requires multi-stakeholder input and agreement.

318. In order to contribute towards achieving these targets, the province would need to improve decision-making and governance, and harness research and information management capacity to identify, develop and maintain datasets to generate policy-relevant statistics, indicators and indices. Furthermore, the

[62] LDP at 98.

LDP plans to increase land under conservation to 35 000 hectares from 25 000 hectares.

319. One of the central SDF visions is to optimise the rich and balanced mix of the regions agriculture, tourism, heritage, natural and mineral resources, and ecosystem services within their scenic settings.

320. The SDF promotes the principle of spatial sustainability, efficiency and resilience in municipal planning; as well as activities that are compatible with the characteristics of the area and mindful of its sensitivities. This aligns with the SPLUMA principles and is applied to the specific needs of the district.

321. What is clear is that the proposed MMSEZ development is in conflict with the desired state of the region and the specific site is not compatible in terms of land use. After an assessment of the site-specific overlay of the area, it's clear there are sensitivities present on the site that exceed the need for a large industrial complex.

322. The MMSEZ conflicts with local and regional developmental plans, and how the growth path outlined in the plans does not cater for the impacts being proposed in the MMSEZ EIA.

323. The stimulation of industrial and mining developments in the area due to the MMSEZ would lead to more incompatible and uncontrolled development in this culturally rich and sensitive area.

324. In terms of process, it fails to use the tool of Strategic Environmental Assessment. An inclusive consultation process involving the relevant government departments and spheres, organised labour including and

affiliated unions, communities, civil society organisations and other stakeholders with the purpose of deciding on a shared low-carbon and egalitarian development plan for the area should instead commence. A Strategic Environmental Assessment under the auspices of the DFFE should be undertaken before any mega-projects can be proposed.

G. JUST AND EQUITABLE REMEDY

325. Given the expansive nature of the facts, expertise and considerations involved in the decisions under review, this Court is not placed to replace the impugned decision.

326. The Applicants contend, however, that the impugned decision cannot be remitted to LEDET for reconsideration. As demonstrated above, LEDET is conflicted.

327. In any event, because the water resources targeted to supply the MMSEZ and particularly the Limpopo River, traverse several provinces and transnational boundaries and indeed national jurisdictions (with reference to the Mutashi Corridor scheme to source water from Zimbabwe's water resources), the decision maker necessarily needs to be the National Government. It is on this basis that we contend that the DFFE be declared the Competent Authority for the purposes of the EA.

H. COSTS

328. I, and the other Applicants, bring this review application in the interests of protecting our environment and use of natural resources. Further, the purpose of this application is to vindicate constitutional rights contained in the bill of

rights.

329. Within this context, this litigation falls within the protections of Section 32 of NEMA.

330. I contend that I, and the other Applicants, have acted reasonably out of a concern for the public interest and in the interests of protecting the environment, as has been detailed above.

331. As a result, and if this application is not successful, this Court should find that the Applicants fall within the protections of Section 32 of NEMA and should not order costs against us, either individually or collectively in line with Biowatch Trust v Registrar Genetic Resources 2009 (6) SA 232 (CC).

332. If this application is successful, I contend that Section 32(3) of NEMA is applicable for the recovery of the Applicants' legal costs and costs incurred in the investigation and preparation of this application.

333. Given the extent, importance and complexity of this application, the cost pursuant to the employment of three counsel is warranted.

I. CONCLUSION

334. The MMSEZ is a large-scale heavy industrial development that will have severe and irreversible negative impacts on the environment and on water resources. The EIAR and numerous specialist studies and reports commissioned for the EIA, whilst grossly deficient, confirm this position.

335. The expected economic benefits of the MMSEZ, the basis on which it is

motivated for in various supporting plans and specialist supports, are based on unsubstantiated assumptions with respect to *inter alia* demand for the steel output of the zone which do not adequately assess risk and costs. In the absence of the application of full-cost accounting principles in particular, the cost-benefit analysis is grossly distorted. The economic argument has served as the determining factor in the decision with no proper consideration for the externalised costs given the scale of this fundamentally unsustainable development, nor any proper consideration of alternative development plans that could potentially achieve the desired socio-economic benefits at a lower environmental cost.

336. The impacts of the carbon-intensive MMSEZ directly on climate and on climate change resilience in this arid region will be significant, impacting on the viability of the project itself and aggravating climate change vulnerability, threatening the food and water security of local communities and entrenching poverty and inequality in the region. These climate-related risks are expressly acknowledged in the specialist Climate Change Assessment Report prepared in August 2021 for the EIA.

337. The decision-maker, LEDET, has been demonstrated to have made an unlawful, unreasonable and procedurally unfair decision in granting the EA –

337.1. The decision-maker granted the EA despite the fact that the EIAR and water and climate impact assessment specialist reports acknowledge that the MMSEZ project will acutely exacerbate the fragile water supply situation in the MMSEZ locality, as assessed in integrated water resource management plans, with which the water requirements of the MMSEZ are in conflict.

337.2. In granting the EA, the decision-maker failed to consider the compatibility of the project with existing spatial and land-use planning instruments as required, with which it is in conflict.

337.3. The decision-maker granted the EA despite the fact that the EIAR and specialist climate impact assessment report acknowledge the serious negative impacts that the coal-based MMSEZ will have on climate in the context of the climate crisis and on South Africa's emissions inventory and associated commitments under the Paris Agreement.

337.4. The EIAR and integrated water services specialist report acknowledges the serious feasibility risks of the project connected to the provision of water and power, both critical dependencies, as well as the political conflict risks connected with sourcing water from a transboundary water resource, and while such information was seemingly considered by the decision-maker, the EA was granted without specific conditions attached and in the continued absence of secure water and power supply.

337.5. The decision-maker granted EA despite the fact that the EAIR and biodiversity offset strategy specialist report acknowledges the serious adverse impact the MMSEZ will have on biodiversity in this sensitive biodiverse region, and that a biodiversity offset strategy is not feasible.

337.6. The decision-maker granted EA despite the fact that the EIA fails to properly consider the need and desirability of the entire project, fails to adequately assess the cumulative impacts of the project over its lifetime and fails to adequately consider alternatives to achieve the

purported socio-economic benefits of the project.

337.7. The granting of the EA cannot be rationally connected to the information that was before the decision-maker.

337.8. The decision-maker granted EA despite the fact that the public participation process was flawed and in the absence of meaningful engagement with interested and affected parties, consideration of or response to the comments and objections to the project they have submitted as required.

338. The decision-maker has been shown to be conflicted and biased in respect of the proposed project and to have wilfully ignored information put before it, including information relating to land-use and spatial planning conflicts.

339. The decision to grant EA breaches the fundamental right to an environment that is not harmful to our health or well-being and is therefore unconstitutional.

340. The EA and the resultant dismissal of the Applicants' appeal thus falls to be reviewed and set aside with costs.

WHEREFORE I pray for an order in terms of the Notice of Motion.

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L. LIEBENBERG-SOUTHWORTH

SIGNED and SWORN to BEFORE ME, at

on day 2022, by the

this of Deponent

who has acknowledged that she knows and understands the contents of this affidavit, and she has declared that he has no objections to taking the oath, that she regards the oath as binding on his conscience and he has uttered the following words : “I swear that the contents of this Affidavit are true, so help me God”.

_____

COMMISSIONER OF OATHS

FULL NAME :

ADDRESS :

CAPACITY :

AREA :