



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM



PROJECT REVIEW

Musina-Makhado Special
Economic Zone meeting
with EAP & LEDET

24 March 2021

PROJECT DETAIL

- Tholoana Environmental Consulting appointed by LEDET in February 2021 for Specialist Review services
- The planned developments for the MMSEZ include but not limited to development of the energy and metallurgical cluster and other associated heavy industries.
- The current application under review is for the clearance of vegetation: Activity 15 – Listing Notice 2 – EIA regulations 2014 (as amended) “The clearance of an area of 20 hectares or more of indigenous vegetation”

PROJECT DETAIL conti....

- Activity 12 – Listing Notice 3 – EIA regulations 2014 (as amended)
“The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan: Limpopo: (ii) within Critical Biodiversity Areas identified in bioregional plans; and (iii) on land, where, at the time of coming into effect of this notice or thereafter such land was zoned open space, conservation or had an equivalent zoning”

PROJECT DETAIL conti....

- It is understood by the Reviewer (Tholoana Environmental Consulting), that each plant or facility that will form part of the MMSEZ, will have to lodge its own application for EA and including any other applicable authorisation i.e. WULA

REVIEW PROCESS

- The review process entailed the use of various specialist's that form part of TEC review Team.
- Each specialist report was reviewed by a specialist in that specific specialist field.
- The review looked at process steps followed according to the EIA Regulations, 2014, as amended. Including the PP processes.
- Timeframe compliance for deliverables by both the EAP and the competent authority
- Contents of the Scoping, EIA and EMPr Reports.

REVIEW RESULTS : TIMEFRAMES

- The PPP process commenced pre-application—from 24 August 2018—including site notices, BIDs, newspaper advertisements (local and national newspapers). *Comment: According to the EIA Report, registration of I&APs continued throughout the EIA process, until submission of the Final EIA Report.*
- Application and draft SR submitted to LEDET: 1 February 2019. Draft SR for comment to the public at the same time. *Comment: The Draft SR and Application was acknowledged by the CA on the letter dated 08 February 2019, email sent on the 13 February 2019. The closing date for comments by the CA was the 20 March 2019.*

REVIEW RESULTS : TIMEFRAMES

- SR approved and accepted: 31 May 2019. *Comment: The Final SR was submitted to the CA on the 07 May 2019 and acknowledged on the 15 May 2019, acknowledgement letter sent on the 16 May 2019 to the EAP.*
- Draft EIR available for comment from 1 September 2020 to 22 October 2020. *Comment: Made available for 36 days (excluding weekends and public holidays).*

REVIEW RESULTS : TIMEFRAMES

- A second draft amended report was set out for public review from 7 December 2020 until 14 December 2020 and from 6 January 2021 until 29 January 2021. However, it was not possible to address all of the comments received during this period before the submission deadline of 31 January 2021. *Comment : 5 + 17 = 22 days (excluding weekends and public holidays). Note, this was a second round of availing the EIA Report for public comment.*
- Final EIA Report submission on 1 February 2021, whereas the prescribed days is 106 days from acceptance of SR *Comment: Submitted 395 days (excluding weekends and public holidays) after acceptance of SR.*

REVIEW RESULTS : PPP

- It is clear that the PPP was undertaken for the project, however the presentation of the majority of the evidence provided, especially under Appendices C to H, made the review process challenging. Evidence needs to be rearranged in an organized manner. Suggestions are provided in the review report.
- Comments by I&APs in the final stages of the application could not be addressed and the EAP provides reason to say this is due to the refusal of extension for submission by the CA.

REVIEW RESULTS : PPP

- The PPP undertaken had limitations, thus did not accommodate illiterate people and non-English speakers. i.e. Venda, Tsonga, Sepedi and Selobedu
- Some of the newspaper advertisements were in both English and Venda, however the Venda version shows NMG media group in the watermark, but it does not depict the actual advertised notice and the date it was published.

REVIEW RESULTS : FINAL SCOPING REPORT

- Only the final Scoping Report was reviewed.
- No Appendices were reviewed.
- The report contains editorial errors, including unreferenced images (Chapter 10), some are not legible e.g. Figure 10.9, 10.10, 10.11
- Inconsistencies on the author of the report and the EAP: On page II of 246, Nsovo Mdungazi is indicated as the author of the report and Nico-Ronaldo Retief as the reviewer and approver. Section 12 of the report indicates the EAP as details about Nico-Ronaldo Retief.
- Other editorial comments are in the review report.

REVIEW RESULTS : FINAL EIR

- No extension was granted by LEDET. The letter signed 26 October 2020, bares reference, point 2 of the letter grants Extension for submission of the EIAR to 31 January 2021 and states that no further extension will be provided as the project has exceeded the regulated timeframes as per the EIA regulations 2014 (as amended).
- The report is bulky, with too much theory and numerous repeats in many places – making it not very suitable for the majority of I&APs, who would have also had problems in downloading such a large report, particularly as these I&APs are in a rural setting.
- maps and photos have been provided; however, some aspects were left out i.e. few houses and graves have been mentioned in the report than the number of houses found on site during the site visit.

REVIEW RESULTS : FINAL EIR

- There are a lot of errors, and issues in the report, including cut and paste from the Atlantis SEZ report. The EIR editorial version will be made available.
- The Eskom supply option was not investigated;
- Some specialist studies not done, e.g. Acid rain, avifauna, agriculture, Geotech. The Scoping report plan of study was not complied with.
- Under the EAPs opinion in the EA - Page 958 lists some specialist studies or aspects of specialist studies that were not undertaken. (e.g. the Present Ecological State (PES) of all the wetlands and pans in the region was not assessed).
- Other comments are provided in the full review report.

REVIEW RESULTS : EMPr

- Although the EMPr adheres to the information requirements as per the EIA regulations 2014 (as amended), Appendix 4, it is cumbersome and contains background information more suited for the EIR.
- The EMPr makes it difficult for those responsible for implementation to familiarize themselves with the crux of the EMPr.

REVIEW RESULTS : EMPr Conti...

- The document is less user friendly as the persons' responsible for implementation will have to consult different sections of the report for one activity.
- Specialist recommendation should be incorporated with other measures listed according to the project stage and according to the management aspect categories for each stage

REVIEW RESULTS : Specialist Report

- Socio-Economic Assessment
 - The report contains editorial errors – Detailed in the review report
 - Almost all the impacts focused on economic aspects, and social aspects were severely neglected (and there will be many social impacts – both positive and negative).
 - Although the metallurgy aspects have been addressed in detail, issues pertaining to energy generation have not been given adequate attention.
 - Specialist expertise: information on specialist's expertise was not included.

REVIEW RESULTS : Specialist Report

- Socio-Economic Assessment
 - Indigenous, Traditional, Tribal and other land-connected peoples should be acknowledged and given specific attention – Free, Prior and Informed Consent (FPIC): no mention was made of FPIC in the report. This is problematic, especially since part of the site is reported to fall within Venda Tribal Authority land.
 - HIV/AIDS, STIs and TB were also not considered as is required for large infrastructure developments, while the proposed Musina-Makhado SEZ is, according to the EIA Report, the largest single planned SEZ development in the country.
 - A number of requirements for specialist reports contained in Appendix 6 of the EIA Regulations, 2014 were not met
 - Additional comments are in the review report.

REVIEW RESULTS : Specialist Report

- Mintek's Mineral Economics and Strategy Unit (MESU)
 - Although the MMSEZ has competitive advantage, the study recommended that a detailed study is undertaken on the availability, cost and quality of critical raw materials (coking coal, ferrochrome, manganese and iron ore) to the metallurgical complex and the implications this will have on the overall business case for MMSEZ.
 - As supporting information, the report/study has relevant details that are useful in justifying the location and choice of industry for the site

REVIEW RESULTS : Specialist Report

- Specialist Climate Change Assessment Report
 - The study considered the climate change impacts of the project in the context of both South Africa's domestic legal environment as well as the international commitments the country has made. The report builds on a 2° C target (instead of the 1.5° C target as is envisaged in the Paris Agreement).
 - The report has considered 'some' of the recommendations of the study. Interesting to note that the EIR provides that the Cumulative addition to climate change and GHG emissions would be High before mitigation and then Very High after mitigation
 - Detailed comments are in the review report

REVIEW RESULTS : Specialist Report

- Impact Study on Tourism and Food Security (Tourism)
 - The report has included the recommendations of the specialist report. However, the same comments in terms of the specific measures required to mitigate the impact of the MMSEZ are lacking.
 - Detailed comments are in the review report.

REVIEW RESULTS : Specialist Report

- Internal Master Plan
 - The Master Plan is basically a high-level land allocation on map showing space allocation for the different land uses. While IMP does note that there are about 200ha of wetlands and 150ha of Baobab trees within the MMSEZ that need to be taken into account, these have not influenced the land use map provided. Except for the reflection of the floodlines within the plan (with major land uses located within it), no other site attributes seem to have helped shape this plan.
 - The IMP has very limited value to inform the EIA decision process.

REVIEW RESULTS : Specialist Report

- Planning Impact Assessment Report
 - The report has been prepared by a professional town planner. However, confirmation of registration in the relevant field is not stated.
 - The report does cover the key aspect expected in a town planning report. The shortcomings identified are not significant as to affect the overall appropriateness of the report
 - Other additional comments to be addressed are in the review report.

REVIEW RESULTS : Specialist Report

- Freshwater Impact Assessment
 - Motivation for using a 51m width buffer for the pan wetland has not been provided.
 - Additional wetlands are assumed to be within the site, motivation should be provided as to why they were not assessed.
 - Additional mitigation measure (rehabilitation/no-go) needs to be provided not only to rely on Offset as a solution.
 - Required Additional Reports :
 - Wetland Rehabilitation plan
 - Wetland Monitoring plan
 - Wetland Offset Strategy/plan

REVIEW RESULTS : Specialist Report

- Floodline Delineation Report
 - No assumption or limitations form part of the report.
 - The stormwater management report accommodates the 1:50 year flood occurrence and should also accommodate the 1:100 year flood occurrence.
 - A Baseline Flood Hydrology with the inclusion of storm rainfall depths has not been included in the report.
 - Catchment Hydrology and Peak flows have not been included in the report.

REVIEW RESULTS : Specialist Report

- Flora and Fauna Impact Assessment
 - Fauna and Flora identified on site did not have a photographic evidence to show the current status of the proposed site.
 - Alien invasive species identified onsite should have a photographic evidence:
 - The alien invasive species must be eradicated using the Alien Invasive Management Plan
 - Protected plants species:
 - The coordinates of the location of each of the protected species identified on site should be recorded because of the importance of those protected plants and photographic evidence need to be provided.

REVIEW RESULTS : Specialist Report

- Flora and Fauna Impact Assessment
 - Protected fauna species: the invertebrate (Rear Horned Baboon Spider) identified on site as commercially protected should have a photographic evidence and the coordinates of the habitat of the species found on site.
 - There are two species of sensitive protected bat species and invertebrates (mopani worms) have been highlighted by I&APs as breeding and occurring on the proposed site and this needs to be verified and addressed.
 - Other comments are further detailed in the review report.

REVIEW RESULTS : Specialist Report

- Heritage Impact Assessment
 - A field survey confirmed that not all graves were identified (geo-referenced) within the study area.
 - A more intense field survey of the receiving area should further be undertaken to identified the cultural heritage resources that were left out.

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REVIEW RESULTS : Specialist Report

- Palaeontological Impact Assessment
 - Fossil Chance Find Protocol should be added to the EMPr
 - The report has some, “Error! Reference source not found” issues.
 - The Legend or Colour explanation provided on the SAHRIS PalaeoSensitivity map should be used to explain Figure 3.
 - Dreyer4: Reddish sands and mudstones have no figure or photogenic evidence or any source of reference within the report.

REVIEW RESULTS : Specialist Report

- Visual Impact Assessment Report
 - Sensitive Visual receptors SVR (eg. Residents) are not well represented in the report - no views/ photos were taken from SVR locations - at least one in the 0 to 5km radius, 5 - 10 km, 20 - 30km radius - this must be followed by specific mitigation measures for each range.
 - Access roads and other linking infrastructure can be included in the report and assessment.
 - Recommendation: There is sufficient information to conduct visibility maps for existing roads, road upgrades, rail, power lines that will be associated with the project as a whole.
 - Detailed comments are in the review report.

REVIEW RESULTS : Specialist Report

- Air Quality Impact Assessment Report
 - The AIRSHED report correctly recommended that an air quality management plan set out in their report be adopted and it must include:
 - The mitigation and management of all plants.
 - Future facilities will be required to complete an EIA and apply for a new Atmospheric Emission License (AEL) and may be required to an air quality impact study for an AIR;
 - Ambient air quality monitoring; and
 - Implementation of the reporting procedures.

REVIEW RESULTS : Specialist Report

- Noise Impact Assessment Report
 - The recommendations and mitigation measures made in the noise impact assessment report should be implemented to ensure that all issues of concern are addressed, and potential impacts minimized. The noise impact assessment report does not identify any fatal flaws to the project from a noise impact point of view.

REVIEW RESULTS : Specialist Report

- Health Impact Assessment
 - COVID-19 and the impact thereof on the proposed development should be studied comprehensively and included in an updated HIA;
 - The assimilative capacity of the atmosphere should be studied and the Air Quality Index (AQI) determined. This information is vital in the allocation of emission allowances for new industrial areas;
 - The location of the Hazardous Waste site should be reconsidered and the probable relocation of the potentially affected community investigated;

REVIEW RESULTS : Specialist Report

- Health Impact Assessment
 - A Health Management Plan should be developed;
 - The initiation of a harmonized surveillance and response system; and
 - A Resettlement Action Plan be compiled, implemented if the Mopane community is to be relocated.

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REVIEW RESULTS : Specialist Report

- Geo-Hydrological Report
 - There is need for inclusion of GIS maps to show the study area location.
 - No numerical modelling was carried out and no scenarios were run to predict the possible outcomes / impacts on groundwater pollution and levels due to the different phases of project activities in the study area (status quo, construction, operational, closure and post closure phases) in the study area.
 - Additional comments are contained in the review report.

REVIEW RESULTS : Specialist Report

- Soils and Land capability Assessment
 - Most of the references in the text were not listed in the reference section for verification
 - Recommendations for mitigation measures in order to manage the anticipated impacts and to comply with the applicable legislation were not provided
 - No photographs evidence during soils sampling
 - No photographs evidence showing the different classes of land capability found in the proposed project area

REVIEW RESULTS : Specialist Report

- Biodiversity offset Strategy Status Quo and Strategy Report
 - Some of the sources in the references section were not found in the report
 - No management plan in place for those animals' species which may not be capable of relocating by themselves.
 - The vegetation communities were not mapped
 - The validity net gain for relocation of protected trees needs to be verified in practice.
 - A biodiversity offset was found not to be feasible and alternatives need to be identified
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REVIEW RESULTS : Specialist Report

- Occupational Health Risk Assessment Report
 - The report is too broad as no site walks were carried out and the specialists may not even be aware of the type of area they are assessing.
 - The study only focuses on occupational health, baseline data on Occupational hygiene should have been taken into account so that when monitoring is carried out during operation, the baseline is known.
 - The report should have been done in the next stage for the plants as more information would have been available, at the moment, the report contains a lot of theory and assumptions as a lot was unknown.

REVIEW RESULTS : Specialist Report

- Water Supply Report
 - There is need for inclusion of GIS maps to show the study area location.
 - Need for presenting the layouts of the preliminary design of water systems for the project in AutoCAD or GIS drawings.

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REVIEW RESULTS : Specialist Report

- Draft Waste Specialist Study

The following are areas of concern in the report:

- The lack of adequate airspace locally and lack of a hazardous waste disposal facility within economically feasible distances.
- The recommendations made herein for waste by rail are really very high level and maybe considered to be very speculative.
- The industry waste management plan prepared can be construed to be very generic and lacking in feasible actionable plans and strategies on how specific waste management challenges are going to be addressed.

REVIEW RESULTS : Specialist Report

- Draft Waste Specialist Study

The following are areas of concern in the report:

- The financial feasibility of the long-term waste management options may come into question.
- The systemic lack of adequate local institutional arrangement to manage industrial waste management in the long term may come into question.
- The carbon footprint and environmental sustainability of some of the proposed waste management arrangements may come into question.

REVIEW RESULTS : Specialist Report

- Storm Water Management Report
 - Although the GN 704 prescribes designs for a 1:50-year flood recurrence interval for construction design and operation of clean and dirty water systems, given the risk of monetary loss, loss of revenue or loss of utilities is unacceptably high at the MMSEZ facilities, *there is need for also providing 1:100-year flood recurrence interval flood peak scenarios, giving the nature of flow velocities, their impacts and mitigation measures.*

REVIEW RESULTS : Specialist Report

- Storm Water Management Report
 - According to the GN 704 (section 4a) no person in control of a mine or activity may locate or place any residue deposit, dam, reservoir, together with any associated structures of any other facilities within the 1:100-year flood-line or within a horizontal distance of 100 metres from any water course or estuary. There is need for an integration of the storm water plan and with the flood line map of the area. The facilities for impounding for example, dirty storm water may be within the 1:100-year flood-line

RECOMMENDATIONS

- Where consultations were inadequate, more time must be provided for these to be carried out. There were clear limitations in the public participation process, with regards to accommodating illiterate people and non-English speakers. The EIA regulations are clear that cases such as this should be accommodated with alternative measures (S41(2)(e)).
- Specialist must be provided with more time to update their studies as this was previously requested.

RECOMMENDATIONS conti....

- EAP must be provided with time to close the gaps identified where possible.
- The comments made above on the specialists reviews, SR, EIR and EMPr should be considered by the EAP.
- Based on the conducted reviews, the EIR, EMPr and some specialists assessments are not sufficient for the CA to take a decision on the application for EA.

END OF PRESENTATION

DISCUSSIONS OR QUESTIONS