# **Department of Environmental Affairs**

Chief Director: Integrated Environmental Authorisations

Sabelo Malaza

By email: <a href="mailto:smalaza@environment.gov.za">smalaza@environment.gov.za</a> sdlamini@environment.gov.za

Copies to:

# Savannah Environmental (Pty) Limited

Gabriele Wood 1<sup>st</sup> Floor, Block 2 5 Woodlands Drive Office Park Woodmead Johannesburg 2191

By email: Gabriele@savannahSA.com

## **Gunn Attorneys**

Adam Gunn

By email: adam@gunnattorneys.co.za

DEA ref: 14/12/16/3/3/3/40 Our ref: CER12.4/RH 10 November 2016

## Dear Madam

# SUBMISSIONS ON FINAL SCOPE OF WORK REPORT FOR THABAMETSI IPP COAL-FIRED POWER STATION DEA REF 14/12/16/3/3/3/40

- 1. We refer to the final scope of work report ("the FSR") for the climate change and palaeontological impact assessments for the proposed Thabametsi coal baseload independent power producer (IPP) power station ("the project").
- 2. As you are aware, we act for Earthlife Africa Johannesburg ("our client"), a registered interested and affected party (I&AP) in relation to the environmental impact assessment process for the project.

2<sup>nd</sup> Floor, Springtime Studios, 1 Scott Road, Observatory, 7925 Cape Town, South Africa Tel 021 447 1647, Fax 086 730 9098 Email info@cer.org.za, www.cer.org.za

- We refer also to our comments on the draft scope of work report (DSR) dated April 2016, of 25 May 2016 ("the DSR comments").
- 4. There appear to be no substantive changes from the DSR to the FSR, and our client's many suggested changes have not been incorporated into the FSR. The FSR therefore remains inadequate in many material respects. Our client stands by the DSR comments and recommendations made therein, and we incorporate by reference our client's DSR comments as comments on the FSR. A copy of the DSR comments is attached as A1, for your ease of reference.
- 5. We particularly reiterate our DSR submission that the proposed scope for the climate change impact assessment (CCIA) is far too narrow an assessment, and at odds with global practice in this area.
- 6. We do not intend to repeat the DSR comments; however, we do wish to re-emphasise the following as indispensable requirements for the CCIA to be conducted. The CCIA must consider several aspects of the relationship between the proposed project and climate change, including:
  - 6.1. the project's direct impacts on climate change. In addition to simply considering the extent of greenhouse gas (GHG) emissions to arise from the project, this must include as assessment of: indirect or full life-cycle emissions; cumulative emissions; and the social cost (i.e. the external health and environmental costs) of carbon;
  - 6.2. the ways in which the effects of climate change will impact on the project, including the effect on the water resources necessary for the project and the likelihood of the project being unable to operate for its full expected lifespan due to South Africa's Paris Agreement obligations and a collapsed coal market this would result in the project becoming a stranded asset; and
  - 6.3. how the project's impact on South Africa's environment and society will be affected further by climate change. This would include the ways in which the proposed project would impact on South Africa's own necessary adaptations to a changed climate.
- 7. Our additional comments below relate, largely, to recent developments relevant to the impact assessments and incorporate further input on the contents of the FSR.

#### **Background & Relevant Developments**

## Publication of the FSR

8. We were advised that this FSR had already been submitted to the Department of Environmental Affairs (DEA) on 18 July 2016, and accepted by DEA on 25 August 2016, without being made available for public consideration and comment. This is inconsistent with the requirements of the Environmental Impact Assessment (EIA) Regulations, 1 2010, which were confirmed by DEA to apply to these assessments.

- 9. On 30 September 2016, we wrote to DEA advising that, in terms of the EIA Regulations, 2010, the I&APs, including our client, should have been given an opportunity to comment on the FSR, and requesting that:
  - 9.1. the FSR be made available to I&APs for comment in terms of regulation 56 of the EIA Regulations, 2010 without delay; and
  - 9.2. DEA revoke its acceptance of the scope of work report to allow the submission of comments by I&APs; the consideration of such comments by DEA; and, after having considered the input of I&APs, a fresh decision to be made by the DEA on whether to approve the scope of work report.
- 10. On 7 October 2016, we received a response from DEA advising that "that the Department has considered (the applicant's) submission and addressed (its) concerns. The final scope of work will be made available to registered interested and affected parties for comment and resubmitted to the Department for consideration."

-

<sup>&</sup>lt;sup>1</sup> Regulation 56 of the EIA Regulations, 2010.

- 11. The FSR was, as a result, made available to I&APs for consideration and comment on 9 October 2016, with comments due 11 November 2016.
- 12. Given that the climate change impact assessment report, was, according to an email from Gabriele Wood of Savannah Environmental (Pty) Ltd dated 12 September 2016 (attached marked A2), already in the process of being "updated and finalised", our client is concerned that the comments on the FSR will not have any bearing on the content of the assessment which seems, in any event, to have commenced already. This would render the commenting opportunity for I&APs nothing more than a tick-box exercise, and would be counter to the object and principles of the National Environmental Management Act, 1998 (NEMA).
- 13. Our client will take strong exception to any indication that the due processes set out and required by NEMA and the EIA Regulations, 2010 are not being adequately followed. The CCIA cannot commence without the final comment by I&APs and approval by DEA of the FSR.

# South Africa's Ratification of the Paris Agreement

- 14. The DSR comments refer to the Paris Agreement, to South Africa's Intended Nationally Determined Contribution now Nationally Determined Contribution (NDC) and to the fact that South Africa had recently become a signatory.<sup>2</sup>
- 15. On 5 October 2016, the Paris Agreement came into effect when at least 55 Parties to the Convention accounting in total for at least an estimated 55% of the total global GHG emissions deposited their instruments of ratification. This happened at an unprecedented and record speed for a multilateral agreement. Currently 103 parties, including South Africa (as of 1 November 2016), have ratified the Agreement.<sup>3</sup> On 4 November 2016, the Paris Agreement entered into force.
- 16. The fact that this Agreement has come into force faster than anyone anticipated is indicative of the rapid and necessary move away from the fossil fuel era. This also means that South Africa is bound to the provisions of the Paris Agreement, in terms of which it is obliged to submit more ambitious and stringent NDCs every 5 years.
- 17. Section 231 of the Constitution confirms that an international agreement binds the Republic once it has been approved by resolution in both the National Assembly and the National Council of Provinces. Furthermore, one of the principles set out in NEMA under s2(4)(n), is that "global and international responsibilities relating to the environment must be discharged in the national interest." In any event, there is no doubt that the project will impact on constitutional environmental rights. The CCIA and paleontological impact assessment must be conducted so as not to violate section 24 of the Constitution, nor any other constitutional right. Section 39(1)(b) of the Constitution requires any interpretation of the Bill of Rights to consider international law. South Africa is therefore under an obligation to meet the commitments set out in its NDC and the Paris Agreement. A new coal-fired power station with an anticipated lifespan of at least 40 years would, our client submits, be inconsistent with any commitments under the Paris Agreement.<sup>4</sup>
- 18. We also pointed out, in the DSR comments, that both the Paris Agreement and South Africa's current NDC have been the subject of criticism for not being strict enough to deter the impending impacts of climate change. Many scientists concur that even a 2 degrees Celsius temperature increase will be catastrophic for South Africa. Even with our NDC commitments in place, more action is required to mitigate against the impacts that will result from climate change. <sup>5</sup> Climate Action Tracker <sup>6</sup> finds South Africa's NDC commitment to be inadequate, and states that

3

<sup>&</sup>lt;sup>2</sup> Paras 13 to 15

<sup>&</sup>lt;sup>3</sup> http://unfccc.int/paris\_agreement/items/9444.php.

<sup>&</sup>lt;sup>4</sup> South Africa's NDC commits to peaking emissions between 2020 and 2025, plateauing for approximately a decade and then declining in absolute terms thereafter.

http://www4.unfccc.int/submissions/INDC/Published%20Documents/South%20Africa/1/South%20Africa.pdf.

<sup>&</sup>lt;sup>5</sup> Para 18 of the DSR comments.

"the "inadequate" rating indicates that South Africa's commitment is not in line with interpretations of a "fair" approach to reach a 2°C pathway. This means it is not consistent with limiting warming to below 2°C. If most other countries were to follow South Africa's approach, global warming would exceed 3–4°C." It also states that "South Africa will need to implement additional policies to reach its proposed targets." <sup>7</sup>

- 19. As a result of the above and the necessary global divestment from fossil fuels, any fossil fuel projects run the high risk of becoming stranded assets, with severe economic and environmental consequences. A study by the Energy Research Centre titled 'The Impact of Stranding Power Sector Assets in South Africa' states that "(g)iven that the recently negotiated outcome of the UNFCCC's Paris Agreement will require commitment even from developing countries to reduce their greenhouse gas emissions, continued investment in high-emitting infrastructure may create costly risks for South Africa in the future ... Investing in new coal-fired assets in the short-term may well prove costly in the longer-term, as the risk associated with not recouping those investments due to policy shifts or technology changes grows higher, especially for plants built after Medupi."8
- 20. It is within this context that the CCIA must be conducted. It is therefore important that the scope of the CCIA is comprehensive and factors in considerations relating to the future obligations and economic trends, which could result in the project becoming redundant and carrying even more harmful risks to society –including human health and wellbeing, the environment, the climate, and the economy than may have been anticipated.

#### **Submissions on the Content of FSR**

- 21. The FSR simply states that "this study seeks to assess the GHG impacts associated with the project. Annual GHG emissions resulting from the project will be estimated ... and the climate change impact of these emissions assessed ...". As repeatedly submitted in the DSR comments, what is required for a comprehensive and effective CCIA is much more than a mere estimate of the GHG emissions of the project.
- 22. The FSR makes no mention of the need to assess the impacts of the project's emissions more broadly; including an assessment of the project's full life cycle emissions, cumulative emissions and the social cost of these emissions; the impacts that climate change will have on the feasibility of the project in going forward; or how the impacts of the project will be further exacerbated by the impacts of climate change.
- 23. In the DEA's (which has now been withdrawn) Acceptance of the Scope of Work Report dated 25 August 2016, the DEA made the following recommendations for the scope of the CCIA:
  - 23.1. that the project's full life-cycle emissions be considered not simply the emissions from the operation phase;
  - 23.2. that the carbon footprint of the project be calculated for construction and decommissioning, and activities related to those phases;
  - 23.3. that the project's resilience to the impacts of climate change be addressed; and
  - 23.4. that all comments received as part of the public participation process should be addressed adequately and should form part of the final additional studies report.
- 24. Our client welcomes the recommendations that were made by DEA, but also emphasises that a more extensive assessment of, *inter alia*, the following is required:
  - 24.1. cumulative emissions, taking into account the combined (<u>current and future</u>) GHG emissions from other coal-fired power stations, mines, heavy industry, and other polluters, and how this will potentially impact on South Africa's emissions targets;

<sup>&</sup>lt;sup>6</sup> http://climateactiontracker.org/.

<sup>&</sup>lt;sup>7</sup> http://climateactiontracker.org/countries/southafrica.html.

<sup>&</sup>lt;sup>8</sup> P4, <a href="http://www.erc.uct.ac.za/sites/default/files/image">http://www.erc.uct.ac.za/sites/default/files/image</a> tool/images/119/Papers-2016/2016-Burtonetal-Impact stranding power sector assets.pdf.

- 24.2. the social cost of the carbon emissions associated with Thabametsi. This entails a consideration of external costs and the impacts on the environment and accordingly on human health and wellbeing, as a result of the project's emissions;
- 24.3. how the project's harmful impacts will be worsened and exacerbated by the harmful effects of climate change in the Limpopo Province and the Waterberg in particular; and
- 24.4. how the impacts of climate change will impact on the feasibility and continued operation of the power station project. This is the question of whether as a result of external factors such as climate change and the international move away from fossil fuel combustion the project will be able to operate for its full anticipated lifespan.
- 25. In addition to the above general submissions and the submissions already made in the DSR comments, we make the following further submissions on the FSR.

#### **Change of Applicant**

- 26. We point out that the "Project Developer" reflected in the FSR is, in fact, no longer the proponent of the project.
- 27. On 26 August 2016, I&APs were given notification of an amendment to the environmental authorisation in terms of the EIA Regulations, 2014.
- 28. The amendment provides for the holder of the environmental authorisation to be amended from "Sanjith Mungroo, Newshelf 1282 (Pty) Limited" (now Thabametsi Power Project (Pty) Limited) to "Harutoshi Nakamura on behalf of Toshihiro Maruo (Director of Thabametsi Power Company (Pty) Ltd), Thabametsi Power Company Limited".
- 29. As a result of the amendment, the authorisation is now held by Thabametsi Power Company (Pty) Limited, and therefore the project developer as reflected on page 2 of the FSR is incorrect, as it is no longer Newshelf 1282 (Pty) Ltd. The FSR must be amended to reflect this.

#### Appendix B5 - The Comments and Responses Report

- 30. The Comments and Responses Report ("the C&R report"), Appendix B5 to the FSR, purports to address and respond to the submissions made in the DSR comments. We do not intend to deal with all the responses herein, however we regard it as important and necessary to highlight, and respond to, some of them, which we address below.
- 31. In relation to our client's recommendation that international best practice and climate change laws of other jurisdictions be considered, the C&R report states, *inter alia*, *that*:
  - 31.1. "Not all international practice is necessarily appropriate or applicable to South Africa and this Project";9
  - 31.2. "legislation and guidelines from other countries cannot be applied to a South African context nor is it feasible to consider in the context of the climate change impact assessment for the Thabametsi power station. The CCIA will be undertaken considering South African legislation and policy which is applicable within the context of the project. By following South African legislation the appropriate scope will be developed for a South African project, which will probably not be the same as that applicable in the EU or the USA...;"10
  - 31.3. "the good practice in CCIAR (in South Africa) is still emerging"; 11 and
  - 31.4. the approach recommended in the DSR comments "is emerging global practice in developed countries" not developing countries".
- 32. These contentions are disputed for reasons that include the following:

\_

<sup>&</sup>lt;sup>9</sup> Item 9, C&R report.

<sup>&</sup>lt;sup>10</sup> Item 25, C&R report.

<sup>&</sup>lt;sup>11</sup> Item 10, C&R report.

- 32.1. In the context of climate change and the assessment of its impacts, particularly in relation to large infrastructure, fossil fuel projects such as the present, all the guidelines and laws highlighted in the DSR comments, including those of foreign jurisdictions, would be relevant and applicable to this project. The intention in referring to these was to reference good examples of CCIA practice, given that this has not yet been developed in South Africa. S39(1)(c)of the Constitution makes provision for the consideration of foreign law when the Bill of Rights is interpreted.
- 32.2. The fact that good practice in this field has not yet developed in South Africa does not mean that the applicant is entitled to follow a sub-par assessment process. If anything, this should serve as an opportunity to set a precedent for a best practice CCIA.
- 32.3. It also cannot be said that our client's recommended approach to the CCIA is confined to developed countries. Such approaches have also been adopted by developing countries such as the Republics of Kiribati and Vanuatu, island nations which are particularly vulnerable to the impacts of climate change and therefore have a duty to implement such a cautionary approach. The reality is that many developing countries are those most at risk in relation to climate change impacts. Similarly, South Africa, as a water-scarce country, is acknowledged in national policy to be very vulnerable to the impacts of climate change. Furthermore, it would clearly be in South Africa's best interests to follow the most comprehensive approach to a CCIA, the country's classification as "developing" as opposed to "developed" in this instance is irrelevant.
- 32.4. It would also be in the applicant's own best interests to fully assess whether the project is likely to be economically feasible in light of current climate change developments. The only possible detriment of following such an approach might be an additional expense to the applicant. This is, however, outweighed by the importance of this assessment and the significant harm that could be caused by the applicant, in the absence of climate change impacts being thoroughly assessed.
- 33. The CCIA for Thabametsi is the first of its kind for a coal-fired power station in South Africa. Because there are no guidelines or legislative requirements in South Africa as to what such an assessment should consider, nor any stipulated requirements from the Minister in her appeal decision, international best practice must be used as a guide and benchmark in this instance. Many other jurisdictions have developed a growing practice in this area. Common features of CCIA laws and guidelines which are implemented in other jurisdictions should guide South African assessments. To ignore global practice by proposing only a basic assessment of the GHGs to be emitted by the project as Thabametsi does would result in a wholly-inadequate CCIA.
- 34. Nevertheless, South African law is quite clear that an EIA must consider all potentially significant impacts. <sup>12</sup> For that reason it cannot be said that South African law does not provide for an assessment of the impacts of climate change.
- 35. We stated, in the DSR comments, that the CCIA should be a comprehensive and accurate assessment of the climate change impacts of the project, which meets the requirements of NEMA and s24 of the Constitution. In response, it was stated that "unrealistic expectations should not be placed on this CCIAR which is essentially being done at Project level". The fact that the assessment is being done "at project level" does not exempt Thabametsi from its duty of care under NEMA or its obligation not to infringe on the constitutional rights of the communities likely to be impacted by this project. No unrealistic expectations are being made all our client asks is for Thabametsi to perform a fair and accurate assessment.
- 36. The C&R report states that our submissions regarding the inadequacy for South Africa's NDC to mitigate the effects of catastrophic climate change relates to national and international policy and that it is not possible or appropriate to assess these issues in the EIA stage of the project.<sup>13</sup> This may be so, but these considerations are certainly relevant at project level, given the likelihood of, and necessity for, more stringent policies being adopted as the impacts of climate change worsen and international pressure around this issue mounts. This could see the project incurring major additional or unforeseen expenses or no longer being able to operate. It

<sup>&</sup>lt;sup>12</sup> Regulation 31(2)(I)(i) of the EIA regulations, 2010.

<sup>&</sup>lt;sup>13</sup> Item 18, C&R report.

also means that the climate change impacts of the project will not be minor, given that South Africa is already expected to be impacted significantly by climate change.

- 37. In response to our client's submissions that the CCIA should consider how climate change will impact upon the feasibility of the project, the C&R report states, at item 21, that "the impacts of climate change on the project are considered a project specific risk and are not considered relevant to the environmental impact assessment (as these do not represent impacts on the environment) which is conducted in lines with South Africa's EIA regulations." On the contrary, as explained above, should the project become infeasible and unable to operate for its full expected lifespan, it would become a stranded asset and this could have numerous significant impacts from an environmental and socio-economic perspective, which Thabametsi is required to consider. Because the project would require water and coal to operate, this would result in the unnecessary use of water required by communities and other sectors and in the unnecessary further destructive and harmful mining of coal. Furthermore, DEA has clearly indicated on previous occasions (in relation to an EIA for Transnet's proposed berth expansion in Durban<sup>14</sup>), and in respect of this project (in the Acceptance of the Scope of Work Report) that an EIA must consider the proposed project's resilience to the impacts of climate change this relates to the project's feasibility in light of the impacts of climate change. This must therefore be considered.
- 38. In response to the submission in the DSR comments that the CCIA must consider the way in which the project will impact on South Africa's own necessary adaptations to climate change, the response states that this was not considered to be part of the scope of the CCIA and that "the decision was made to exclude this on the basis that the EIA process in South Africa looks at the impact of the project of the environment and not vice versa." This is a misunderstanding of the recommendation, which was that the CCIA must look at how the current and future impacts of climate change on the environment (for example water availability, dust emissions and soil fertility) will be exacerbated and aggravated by the impacts that the project will have on these elements of the environment and human health.
- 39. Insofar as the recommendation for the determination of the baseline which constitutes the baseline environment without the impacts of climate change is concerned, the C&R report states that, "climate change impacts and their effect on the project and on the baseline environment was not included in the scope of the work, which is mitigation rather than adaptation focused." This is incorrect. The purpose of determining the baseline environment is to ascertain the scenario in the absence of the climate change impacts, which will materialise in future and will be exacerbated by the project. This relates directly to the project's impacts and this is how the environmental, specifically the climate change, impacts of the project must be determined and assessed.
- 40. We note that, in respect of our recommendation that the cumulative impacts of the project must be considered, the C&R report states that the "impact assessment will include an analysis of the extent to which the project is aligned with South Africa's climate change policy and INDC..." We trust that this means that the project's emissions will not be assessed in isolation and that they will be considered alongside the emissions of other sectors and those of other existing and upcoming industrial developments, to ascertain whether, with current and upcoming emissions, there will be adequate emission space to meet the NDC commitments, with the GHG emissions that will come from Thabametsi.
- 41. The C&R report also states that the project's impacts on water were assessed as part of the EIA phase and that these will be further assessed within the water use licence application (WULA) process. This is unacceptable, firstly and predominantly because the impacts of climate change inherently entail impacts on available water resources and water quality. Secondly, because the water impacts were not adequately assessed in the EIA phase, nor are they being adequately assessed in the IWULA.

<sup>&</sup>lt;sup>14</sup> http://www.berth203to205expansioneia.co.za/documents/FinalEIA/37455%20-%20Berth%20203 205%20Expansion%20EIA%20-%20Climate%20Change%20Study%20-%20Rev 1.pdf.

<sup>&</sup>lt;sup>15</sup> Item 36, C&R report.

42. The FSR gives no indication that it will assess how climate change is going to alter the water availability of the Mokolo and Crocodile West catchments, which the project will depend on. The EIA and WULA do not consider this either. It is well documented that water is a serious concern in the Mokolo catchment and if it is found that climate change reduces the water availability or places uncertainty as to future water availability, this could impose a risk on the long term feasibility of the project. It is suggested therefore that the FSR be amended to provide for such a study to be included.

#### Conclusion

- 43. In conclusion we again request that our recommendations in the DSR comments and herein, be given due and careful consideration, to ensure that the FSR and the CCIA are in line with the Constitution and the requirements of NEMA.
- 44. In the circumstances, we request that the competent authority reject the FSR in terms of regulation 30(1)(b) of the EIA Regulations, 2010.
- 45. Alternatively, we request that the competent authority, at least, request the EAP to make the recommended amendments (as contained herein above) to the FSR, in terms of regulation 30(1)(c) of the EIA Regulations, 2010.

Yours faithfully

**CENTRE FOR ENVIRONMENTAL RIGHTS** 

per:

Nicole Loser Attorney

Direct email: nloser@cer.org.za