In the matter between:

GROUNDWORK Appellant

and

MUNICIPAL MANAGER:
NKANGALA DISTRICT MUNICIPALITY First Respondent

MPUMALANGA DEPARTMENT OF AGRICULTURE, RURAL DEVELOPMENT, LAND AND ENVIRONMENT AFFAIRS (MDARDLEA) Second Respondent

and

ACWA POWER KHANYISA THERMAL POWER STATION (RF) (PTY) LIMITED Third Respondent

---

PROVISIONAL APPEAL IN TERMS OF SECTION 62 OF THE LOCAL GOVERNMENT MUNICIPAL SYSTEMS ACT 32 OF 2000

INTRODUCTION

1. This appeal is made on behalf of groundWork, a non-profit environmental justice service and developmental organisation aimed at improving the quality of life and vulnerable people in South Africa (and increasingly in Southern Africa), through assisting civil society to have a greater impact on environmental governance ("**the Appellant**"). groundWork places particular emphasis on assisting vulnerable and previously disadvantaged people who are most affected by environmental injustices. groundWork is a registered interested and affected party ("**I&AP**") in respect of the proposed independent power producer (**IPP**) Khanyisa coal-fired power station ("**the Khanyisa Project**").

2. This is an appeal in terms of section 62 of the Local Government: Municipal Systems Act, 2000 (**MSA**) in respect of the purported transfer of the provisional atmospheric emission licence (**PAEL**)

17/4/AEL/MP312/14/20 from Anglo Operations (Pty) Ltd ("**Anglo"**) to ACWA Power Khanyisa Thermal Power Station RF (Pty) Ltd ("**ACWA"**) for the proposed Khanyisa Project.

3. We note that the PAEL was issued to Anglo on 11 September 2015 by the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (**MDARDLEA**) as the Licensing Authority (**LA**), with these powers delegated to it by the relevant local authority, as confirmed in the PAEL.

4. The PAEL was transferred on 18 October 2017 by the Municipal Manager of the Nkangala District Municipality (**NDM**), although it is unclear whether this was done in terms of a lawful delegation. This is addressed below. The initial licence will hereinafter be referred to as "**the 2015 PAEL**" and the transferred licence will be referred to as "**the 2017 PAEL**".

5. I&APs were notified of the transfer on 23 October 2017, and in terms of section 62(1) of the MSA, an appeal must be lodged within 21 days of the notification of the decision. This appeal is being lodged timeously on 13 November 2017 within the 21 days. As will be explained below, however, this appeal is a provisional appeal and our client reserves its right to supplement its appeal once formal written reasons, as requested in terms of the Promotion of Administrative Justice Act, 2000 (**PAJA**) and the further clarity and information as sought in our client's letter of 6 November 2017 in relation to the 2017 PAEL, are furnished.

BACKGROUND

6. The Khanyisa Project is a proposed 600MW IPP coal-fired power station intended to be built approximately 10-15km south of eMalahleni, in the Mpumalanga Province. This area falls within a significantly-degraded air quality hotspot, the Highveld Priority Area (**HPA**), which does not meet the national health-based Ambient Air Quality Standards (**AAQS**). 10 years ago, the HPA was declared a priority area in terms of section 18 of the National Environmental Management: Air Quality Act 39 of 2004 ("**AQA**"), and an air quality management plan was adopted in 2012 with the aim of bringing the ambient air in the area into compliance with AAQS.

7. The HPA Air Quality Management Plan (**AQMP**) aims, by 2020, to reduce industrial emissions so as to achieve compliance with AAQS and dust fallout limit values, and to ensure that air quality in all low-income settlements is in full compliance with AAQS.[1] However, despite the declaration of

[1] HPA AQMP 2011.GG No. 35072. 2 March 2012, available at: http://www.saaqis.org.za/documents/HIGHVELD%20PRIORITY%20AREA%20AQMP.pdf viii, xvi, 108; xxiv-xxviii; 117-121; 172-233.

the HPA 10 years ago, the DEA's 2017 mid-term evaluation of the AQMP confirmed that "*there has not been an appreciable improvement in ambient air quality*"[2] since the AQMP was put into place.

8. It is in this context that the LA is obliged to consider the Khanyisa Project, and thus any atmospheric emission licence (**AEL**) application granted, transferred, and/or varied will need to be carefully assessed in terms of the cumulative impact of the full project. In particular, the AEL must provide for the full capacity and size of the proposed project, as well as exact location of the project in relation to the surrounding communities to fully assess the impacts of the Khanyisa Project. Furthermore, the LA is obliged to take account of all relevant considerations in the PAEL transfer/variation or issuance process, such as the progress in meeting the objectives of the AQA, the HPA AQMP objectives, and the Constitution of the Republic of South Africa, 1996 ("**the Constitution**"), as well as the National Environmental Management Act[3] (**NEMA**) Principles, given the significance of the emissions of such a project and the cumulative health impacts in the already-degraded HPA.

9. The full-scale of the Khanyisa Project is outlined in the project's 2015 environmental impact report ("**2015 EIR**") in respect of its application for an amendment of the environmental authorisation (**EA**) that was issued to the Khanyisa Project in 2013. It is planned to be a 600MW power station comprised of four units of 150MW Circulating Fluidised Bed (**CFB**) technology to burn coal and produce electricity. The Khanyisa Project will utilise discarded coal from nearby mines for fuel, and will produce a significant amount of coal ash as waste. As such, the project includes conveyors, storage stockyards for coal and solvents, specific disposal sites for the ash and spent sorbent, as well as general and hazardous waste storage and handling facilities (temporary and permanent).

10. Contrary to the full-scale Khanyisa Project as outlined above, Anglo initially envisaged the Khanyisa Project to be a 450MW plant. The Khanyisa Project had been issued with an EA for a 450MW plant on 31 October 2013. This authorisation has been amended numerous times – including to increase the capacity to 600MW in 2015 as indicated above (a 33% increase).

11. On 2 April 2014, Anglo submitted an application for an AEL for a 450MW coal-fired power station, which was granted on 11 September 2015. In the interim on 10 June 2015, Aurecon advised the Appellant's attorneys of record, the Centre for Environmental Rights (CER), that ACWA had taken

---

[2] https://cer.org.za/wp-content/uploads/2016/07/HPA-AQMP-Midterm-review-Draft-Report_February-2016.pdf 52.
[3] 107 of 1998.

over the project from Anglo, and that various amendments to the EA would take place, which were previously not considered in the 2013 EA. This would include, among others, the increase in capacity of the power plant from 450MW to 600MW. A copy of the email dated 10 June 2015 is attached herewith marked as **Annexure "A**".

12. Whilst the 2015 PAEL was granted after the amendment of the EA to provide for the capacity increase (which amendment was issued on 28 July 2015), the AEL application still provided for a 450MW plant, and therefore a 450MW plant is what the issued 2015 PAEL provided for.

13. On 1 December 2016, the CER on behalf of the Appellant, notified MDARDLEA that ACWA could not rely on the 2015 PAEL issued to Anglo, as it was issued to a different applicant (it did not reflect ACWA as the project developer), and more importantly, the AEL application was based on information relating to the design and capacity of a plant which had since been amended substantially. It was therefore submitted that an application for a new PAEL was necessary; failing which, at the very least, a variation and thereafter, a transfer of the existing PAEL reflecting the changes to the proposed plant and the increase in capacity to 600MW was necessary. It was also recorded that a fresh public participation process would be necessary, which would address the full impact of the 600MW plant insofar as it relates to the PAEL. A copy of the letter dated 1 December 2016 ("**the 2016 submission**") is attached, marked as **Annexure "B"**.

14. Despite the objections outlined above, on 20 February 2017, Aurecon notified I&APs that as a result of the Department of Energy appointing ACWA as a preferred bidder in respect of the Khanyisa Project, it intended to transfer ownership of the PAEL from Anglo to ACWA.

15. On 14 March 2017, the Appellant submitted its objections to the transfer ("**the March 2017 objections**"), reiterating that a fresh PAEL application, providing for the full capacity (600MW) and any subsequent design and location changes in respect of the Khanyisa Project, was necessary, since these changes were not previously considered by the LA when it issued the 2015 PAEL – and that a fresh public participation process in respect of these changes, needed to be conducted. The Appellant submitted that, at the very least, a variation of the PAEL was necessary to reflect the full and accurate details of the Khanyisa Project - including its full capacity, full emissions, and impacts. In addition, it was also submitted that the process should include a full climate change impact assessment for a 600MW plant, as required in terms of the judgment handed down in North Gauteng High Court in the case of *Earthlife Africa Johannesburg v Minister*

of Environmental Affairs.[4] A copy of the March 2017 objections is attached, marked as **Annexure "C"**.

16. Due to certain defects contained in Aurecon's first transfer notification, on 18 April 2017, I&APs were again invited to comment on the 2015 PAEL transfer. Thus on 22 May 2017, CER submitted further objections ("**the May 2017 objections**") to the transfer of the 2015 PAEL, reiterating that the transfer of the 2015 PAEL without the necessary variation was invalid since the 2015 PAEL did not reflect Khanyisa's intended 600MW project. A copy of the May 2017 objections is attached, marked as **Annexure "D".**

17. As outlined in paragraphs 13-16 above, the Appellant has always maintained that the 2015 PAEL does not reflect nor provide for the Khanyisa Project as currently proposed, as it does not reflect the true capacity, design, and intended activities and emissions of the current Khanyisa Project. The 2015 PAEL is therefore defective in its entirety, and not transferable, as the power station that it purports to regulate is, in fact not the Khanyisa Project. This is addressed in further detail below under the grounds of appeal.

18. Despite numerous objections however, the PAEL transfer was granted on 18 October 2017, and notification was given to I&APs on 23 October 2017. No reasons were provided by the LA for its decision to transfer the PAEL

19. Upon request, CER was provided with the 2017 PAEL on 27 October 2017. As mentioned in the preceding paragraph, the 2017 PAEL was not accompanied by reasons for the decision.

20. It also became evident that there were numerous issues of concern with the 2017 PAEL in that it contained changes in addition to the changed licence-holder (which would be the only permissible change under an AEL transfer in terms of section 44 AQA) and that it had been issued by a different LA.

21. Accordingly, on 6 November 2017, CER wrote to both MDARDLEA and NDM requesting full reasons for the transfer and/or variation of the 2017 PAEL, the procedures followed, as well as the delegation of powers in the 2015 and 2017 PAEL licensing process within 90 days, in terms of section 5 of PAJA. A copy of the letter is attached, marked as **Annexure "E".**

22. To date, no response to the queries in the above letter has been received. Nor have any reasons been provided in terms of the request under section 5 of PAJA.

---

[4] *Earthlife Africa Johannesburg v Minister of Environmental Affairs and others* [2017] 2 All SA 519 (GP).

23. As we have not yet received the requested reasons, nor the necessary clarity in relation to the changes in the content of the PAEL and LA, the Appellant is severely hindered in its ability to adequately consider and appeal the 2017 PAEL. The Appellant reserves its rights to supplement this appeal once the necessary reasons and clarity are received, or after the expiry of the prescribed 90 days for the provision of reasons.

24. In the absence of a valid delegation and/or proof of a valid variation process being followed, it would appear that an entirely new PAEL has been issued by the NDM and as such, our client is entitled to appeal the PAEL in its entirety, with a fresh public participation process. Furthermore, in the event that a proper variation process in terms of AQA had not been followed to effect the additional changes to the PAEL, the transfer issued by the LA is *ultra vires* the AQA and therefore deemed invalid, and should be set aside. The Appellant furthermore reserves its right to appeal the PAEL in its entirety, should it become evident that the 2017 PAEL is in fact a new PAEL issued by NDM, and/or was not subjected to the prescribed public participation processes required by the AQA.

25. The appeal to the 2017 PAEL transfer will be dealt with in detail below and is summarised as follows:

    25.1. the 2015 PAEL was incapable of transfer as it did not reflect the proposed Khanyisa Project as currently authorised, and accordingly the 2017 PAEL is invalid as it does not reflect the proposed capacity and activities of the currently proposed and authorised Khanyisa Project;

    25.2. the LA acted *ultra vires* the AQA as the transfer did not meet the requirements of section 44 of the AQA. The scope of the 2017 PAEL goes far beyond the transfer of ownership, as there are additional variations to the content of the licence and it has been issued by a different LA. A new application for an AEL was required; alternatively, public participation on the proposed variation was required; and

    25.3. the LA failed to take into account relevant factors as prescribed in section 44(5) of AQA in deciding to transfer the PAEL, in that no AELs should be issued in the HPA given the fact that AAQS are out of compliance. It is submitted that the AEL should also not have been transferred. The decision to transfer the licence violated section 24 of the Constitution, the section 28 duty of care under the NEMA, the section 2 NEMA principles, AQA's objectives, the 2012 National Framework for Air Quality Management in the Republic of South Africa

("**the Framework**"), the AAQS, section 18 of AQA (declaration of priority areas), and the HPA AQMP. In the circumstances, the transfer should be set aside as invalid.

GROUNDS OF APPEAL

26. <u>The 2015 PAEL was incapable of transfer as it did not reflect the proposed Khanyisa Project as currently authorised, and accordingly the 2017 PAEL is invalid as it does not reflect the proposed capacity and activities of the currently proposed and authorised Khanyisa Project</u>

26.1. As mentioned in paragraph 9, the full-scale of the Khanyisa Project is described in the 2015 EIR submitted in respect of the EA, and includes a 600MW power station using four units of 150MW CFB technology to burn coal and produce electricity. This would include various coal silos and sorbent stockyards, ash and spent sorbent disposal systems and dumpsites, general hazardous waste storage and handling facilities, necessary to cater for the 600MW operation.

26.2. As indicated above, the 2015 EIR assessed the impacts of the plant's increase in capacity. According to the 2015 EIR dated 18 June 2015, the following impacts are most evident from the capacity increase:

26.2.1. PM_{10} exceedances: "*AQIA indicate the respective areas where the PM10 daily limit value of 75 µg/m³ is expected to be exceeded for more than 4 days in a year. The footprint of exceedance is quite large (> 4km outside the western site boundary).The highest concentrations values of PM10 were predicted for Landau Primary School (closest to the proposed project)*."[5]

26.2.2. Increase in pollution due to ash removal and disposal:

26.2.2.1. *"Approximately 248 tonne per hour of ash must be removed from the boilers and transported to the ash lagoon. Should the conveyor be malfunctioning, 13 twenty tonne trucks will be moving to and from the power station on an hourly basis. Limestone must also be imported to the power station in order to remove sulphur from the coal during the combustion process. Approximately 66 tonnes of lime must be*

[5] Aurecon EA Amendment Report 18 June 2015, 21.

imported on an hourly basis which equates to approximately 4, twenty tonne trucks per hour to and from the power station."[6]

26.2.2.2. "The disposal of ash has the potential to pollute water resources, including the contamination of groundwater from leachate and the contamination of surface water from discharge of ash pond effluent."[7]

26.2.2.3. "The ash disposal facility has been designed to accommodate the amount of waste produced thoughout the lifespan of the 450MW power station. Increasing the capacity of the power station to 600MW will result in ash disposal facility having insufficient capacity at some stage during the operational phase of the project. Increasing the capacity of the power station will therefore have quite a significant impact on the ash disposal facility if the size of the facility is not increased."[8]

26.2.2.4. "The potential impact of increased quantity of ash produced through the increased generation capacity (450MW to 600MW) of the station is expected to be the most significant. The increased generation capacity is expected to reduce the planned life of the ash disposal facility by approximately 30%, should the capacity of the ash facility not be similarly increased. Therefore, an extension of the currently planned ash disposal facility will be required prior to the end of life of the power station."[9]

26.3. The most notable impact as a result of the increase in capacity, is the increase in ash and the need for the extension of ash disposal facility, as well as the increase in air pollutants in the area, which includes the negative impact on Landau primary school. A copy of the relevant extracts from Aurecon's 2015 EIR are attached, marked as **Annexure "F"**.

26.4. A further impact (which is not adequately dealt with in the 2015 EIR), is the increase in greenhouse gas emissions to emanate from the project, and the resultant climate change impacts of this. As indicated above, the Thamabetsi judgment found that a full Climate Change Impact Assessment (CCIA) is required as an integral part of the EIA process. To

[6] Aurecon EA Amendment Report 18 June 2015, 35-36.
[7] Aurecon EA Amendment Report 18 June 2015, 42.
[8] Aurecon EA Amendment Report 18 June 2015, 43.
[9] Aurecon EA Amendment Report 18 June 2015, 45.

the extent that an adequate CCIA is not conducted by ACWA as required – and in any event - the PAEL variation and application must at least set out the estimated full lifecycle greenhouse gas (GHG) emissions (direct and indirect) and proposed measures to mitigate the emissions of the Khanyisa Project. The Appellant has instituted litigation in the North Gauteng High Court (case no. to ensure that a CCIA forms part of the Khanyisa Project's EIA process.

26.5. One of the considerations which was outlined in the 2015 PAEL was that, due to the large impact of fugitive emissions from the ash, the licence-holder was to prepare a Fugitive Emission plan within 6 months of the 2015 PAEL, i.e. March 2016.[10] The Fugitive Emission Plan, however, is not in the Appellant's possession, and it is not clear whether this has been prepared. According to the 2015 EIR as mentioned above, the Khanyisa Project has only catered for the ash disposal for a 450MW plant, and not for the full 600MW plant. These additional impacts need to be addressed in the PAEL; however, this was not considered by the LA.

26.6. In terms of point source parameters, the actual figures contained in the point source parameters (such as gas exit temperature, gas exit velocity, height of release above the ground) in 6.4.1 of the PAELs seem to differ from what is provided in the 2015 EIR. Further, it is surprising to note that there are only two source parameters of emission sources from fuel and ash handling, when there are conveyors, silos, coal washers, and waste ash disposals facilities mentioned in the EA. Further, in terms of appliances and control measures, there are various possible measures mentioned in the 2015 EIR; however, in terms of appliances and control measures, only a bag filter / water sprayer is mentioned in the PAEL. In terms of bag filters, it is not indicated as to when the abatement equipment will be in place, when it will be commissioned, or what the technology type will be, as it is indicated as "TBA" or "to be announced". This is wholly inadequate.

26.7. As can be seen from the preceding paragraphs, the impacts as a result of the increase in capacity of the plant from 450MW to 600MW are significant. In order to adequately regulate the activities of the 600MW Khanyisa Project, the 2017 PAEL needs to specify the exact capacity, all emissions in full, as well as the exact location of the plant, and details of the disposal facilities.

[10] Condition 7.5.1 of 2015 PAEL.

26.8. Neither the 2015 nor the 2017 PAEL however, address or regulate a full 600MW plant or any of the associated air emission impacts as set out above. These deficiencies of the PAEL were addressed in the March 2017 objections and the May 2017 objections. The most notable deficiencies are as follows:

26.8.1. The 2015 and 2017 PAEL both only provide for and seek to regulate the emissions from a 450MW CFB plant, comprised of 3 boiler stacks (unit 1, 2 and 3), with height of release above the ground being 150m.[11] However, the Khanyisa Project is for a 600MW CFB plant comprised of 4 stacks.

26.8.2. Despite the 33% increase in capacity, the proportionate amount of raw material, design production capacity of the by-products (including bottom and fly ash), water, absorbent, storage silos, transportation of the coal, as well as the disposal facilities, have not been reflected in various conditions of the 2015 and 2017 PAEL. For instance, under condition 5, it describes that there will be 3 silos located on the side of each boiler to store sufficient bed material (approximately 300 tons). However, there are now 4 boilers.

26.8.3. As can be seen from paragraphs 26.2-26.4 above, the increase in capacity will have a negative impact in terms of air quality, particularly at Landau primary school, which is 2km from the Khanyisa Project. However, under the "*Description of the Surrounding Land Use*" in page 4 of the PAEL, is described as "*number of towns and human settlements approximately 10 km to the north, the most important of which is Emalahleni situated approximately 10 km to the north, while Ogies and Phola are situated approximately 17km to the southwest*." and "*the surrounding land is mostly vacant, underdeveloped land*…". As can be seen, the existence of Landau primary school is not included in the description.

26.8.4. There were numerous changes and additions to the 2015 EA, including realignment of roads, 400kV substation and power line for the Khanyisa power station, which may not have been accurately reflected in the maps and co-ordinates of the 2017 PAEL. The 2017 PAEL description under "Physical Address" includes additional land not previously reflected in the 2015 PAEL, such as Klippan 332 and Klipfontein portions 145 and 167. In light of the aforementioned, it is not certain whether or not the graphical information in condition 5.5 and figure 1; co-ordinates in condition 6.4.1, 6.4.2 and 3; and extent

[11] Condition 6.2 and 6.4.1 of the 2015 and 2017 PAEL.

of land in condition 3 of the PAEL are current and accurate, and the Appellant calls upon the Third Respondent to provide accurate co-ordinates and maps pertaining to the 600MW plant and ash disposal facilities.

26.9. Given that the 2015, and consequently the 2017 PAEL do not adequately reflect the 600MW Khanyisa Project as currently authorised and proposed, the 2015 PAEL is invalid and therefore cannot be transferred to Khanyisa Project. The 2017 PAEL is consequently defective in its entirety, and not transferable, as the power station that it purports to regulate is, in fact not the Khanyisa Project.

LA acted *ultra vires* the AQA transfer provision by materially altering the 2017 PAEL; therefore the transfer is invalid

26.10. As mentioned previously, the 2017 PAEL indicated that there was a transfer of a licence, and there was no mention of a variation process having been followed to effect the multiple amendments to the 2015 PAEL.

26.11. Section 44(1) of AQA provides that, "*if ownership of an activity for which a provisional atmospheric emission licence or an atmospheric emission licence was issued is transferred, the licence may, with the permission of a licensing authority, be transferred by the holder of the licence to the new owner of the activity*."

26.12. In terms of section 46(2) of AQA, the variation of a licence includes: *"(a) the attaching of an additional condition or requirement to the licence; (b) the substitution of a condition or requirement; (c) the removal of a condition or requirement; or (d) the amendment of a condition or requirement*".

26.13. Section 46(3) provides that public participation in such proposed variation is required when: "*(a) the variation of the licence will authorise an increase in the environmental impact regulated by the licence; (b) the variation of the licence will authorise an increase in atmospheric emissions; and (c) the proposed variation has not, for any reason, been the subject of an authorisation in terms of any other legislation and public consultation".*

26.14. In terms of section 1(a)(ii) of PAJA, the powers to exercise administrative action are derived from and only extend insofar as the legislation allows. The 2017 PAEL indicates that it is only a transfer of licence in terms of section 44 of AQA. Therefore, the only change that can be reflected in the PAEL by way of transfer, is the name of the licence-holder. If there are amendments in the licence other than the name of the PAEL holder, the LA was

acting *ultra vires* the AQA by purporting to address such changes via the transfer provisions.

26.15. Despite transfer only allowing for the change in the holder's name (as outlined above), the Appellant notes that, at least the following material changes were made to the 2015 PAEL:

26.15.1. LA substitution: LA in respect of the 2015 PAEL was MDARDLEA, however, the 2017 PAEL now reflects the LA as NDM;

26.15.2. zoning change: in the 2015 PAEL, the zoning as per town planning scheme was "mining". This has now been changed in the 2017 PAEL to "special use" zoning; and

26.15.3. extension of the licensed location: The 2015 PAEL provided for premises located on 10 100km^2 land, which is to be located in an area limited to *"the remaining portion (Extent) of the Farm Groenfontein 331 JS and the remainder of portion 1 of the Farm Klipfontein 322 JS, Mpumalanga Province*". In addition to these portions of land, the 2017 PAEL extends the area by altering the physical address, to include Klippan 332 and Klipfontein portions 145 and 167.

26.16. The increase from 450MW to 600MW will require a larger project site, as well as the ash disposal capacity. The Klipfontein portions 145 and 167 will presumably cater for the increase in the project site, and Klippan 332 will presumably cater for the increase in ash disposal capacity, but this is unclear. At any event, it is evident that the proposed Project area is larger or includes areas which were not included under the 2015 PAEL.

26.17. The alteration of the capacity of the Project, size of the location, and changing the location of activities of the PAEL constitute material changes, since altering any of these conditions may result in increased impacts for the surrounding communities and the environment. This is particularly so since different locations may have a specific condition such as (elevated land / certain prevalence of wind direction associated with an area / closer proximity to densely populated areas or schools) which may affect the pollution levels and dispersion differently. It is submitted that such amendments were therefore required to be subject to public participation in terms of AQA's section 46(3).

26.18. It is clear that these amendments go far beyond a transfer of ownership. At the very least, the proposed changes should have been addressed through a variation application with meaningful public participation, as required by the AQA.

26.19. In addition to the discrepancies outlined above, the LA has changed from MDARDLEA to NDM without sufficient proof of delegation having taken place. Ordinarily, the metropolitan and district municipalities are charged with implementing the atmospheric licensing system, unless such powers are delegated by the municipality to a provincial organ of state.[12] As mentioned previously, the 2015 PAEL was issued by the Chief Director of MDARDLEA. According to the 2015 PAEL, there was a delegation of authority in terms of Section 36(2) AQA.

26.20. Despite the LA being MDARDLEA, the 2017 PAEL states that the NDM is the LA, and issued the transfer.

26.21. The proof of the delegation of powers in terms of the 2015 and 2017 PAELs was requested on 6 November 2017. Should the delegation of powers not have occurred properly in 2015 or 2017, it would mean that the LA at the time did not have the authority to issue the respective PAELs, and/or that NDM issued an entirely new AEL – without following the prescribed public participation processes. The Appellant reserves its right to challenge the 2015 and/or 2017 PAEL respectively.

26.22. In light of the material alterations made to the 2017 PAEL, discussed in paragraphs 27.6-27.11 above, in the absence of a valid variation, it is submitted that the LA acted *ultra vires* the AQA as the transfer did not meet the requirements of section 44 of the AQA. The scope of the 2017 PAEL goes far beyond the transfer of ownership, as there are additional variations to the content of the PAEL and it has been issued by a different LA. A new application for an AEL – with public participation - was required; alternatively, public participation on the proposed variation was required. In these circumstances, the Appellant would be entitled to appeal the 2017 PAEL in its entirety and reserves its rights in this regard.

[12] s36(1) and (2) of the AQA.

27. The 2017 PAEL transfer failed to take into account all relevant factors as required by s44(5) of the AQA; therefore the transfer is invalid

27.1. As indicated above, the Khanyisa Project is intended to be located within the HPA. The AQMP of the HPA has the goal of ensuring compliance with the AAQS. Ten years after the HPA's declaration, air quality has not improved significantly, if at all, and non-compliance with AAQS is ongoing, as confirmed by government reports.

27.2. In terms of section 44(5) of AQA, the LA must "*take into account all relevant matters including whether the person to whom the licence is to be transferred is a fit and proper person as contemplated in section 49".*

27.3. "All relevant matters" would include the consideration of the full and cumulative impacts of the proposed 600MW Khanyisa Project (including increase in capacity, the need for an increase in the size of the ash disposal facility and the emissions arising therefrom) in relation to the HPA; the NEMA duty of care; the NEMA Principles (section 2 NEMA); the AQA; the Framework; the HPA AQMP; and the AAQS.

27.4. When considering these factors, the rational conclusion is that no AELs should be issued in the HPA given the fact that AAQS are out of compliance even 10 years after the declaration of the HPA. It is submitted that no AELs should be transferred for the same reason. In the alternative, such AELs as are issued should contain strict emission standards (significantly stricter than the MES) and all necessary measures to minimise and reduce impacts on the environment and human health and wellbeing.

27.5. The decision to transfer the PAEL violates: AQA's objects, section 18 of AQA and the HPA AQMP, section 24 of the Constitution, NEMA's section 28 duty of care, and the NEMA principles. These will be dealt with in turn, below.

LA did not consider the full extent and impact of the Khanyisa Project in relation to AAQS and HPA AQMP

27.6. According to the 2015 PAEL, the PAEL was granted **based on (now wholly outdated) information as provided in the 2 April 2014 AEL application**, as well as information that became available to MDARDLEA during the application, which included:[13]

[13] Cover letter of 2015 PAEL, 1-2; 2015 PAEL, 1.

27.6.1. 2 April 2014 Application;

27.6.2. objectives and requirements of relevant legislation and guidelines including Minimum Emission Standards and National Ambient Air Quality Standards in terms of the AQA;

27.6.3. background levels of criteria air pollutants;

27.6.4. objectives and targets contained in regulatory requirements; and

27.6.5. findings of the site visits.

27.7. An essential relevant factor, is that the emissions from the Khanyisa Project will inevitably deteriorate the already severely-degraded HPA air quality, affect vulnerable communities' health and wellbeing, and increase greenhouse gas emissions, as submitted in our March and May 2017 objections.

27.8. The May 2017 objections contain a report prepared by Dr R Sahu (an expert independent consultant with over 28 years' experience in the fields of environmental, mechanical and chemical engineering). Dr Sahu reviewed the Khanyisa Project's Air Quality Impact Assessment for the 600MW Project, and his report was submitted as part of objections to Khanyisa's application for an electricity generation licence from the National Energy Regulator of South Africa. A copy of the report was also part of the May 2017 objections to the transfer, and as such was required to have been considered as a relevant factor by the LA. A copy of the Dr Sahu's Report ("**Dr Sahu's report**") is attached as **"Annexure G"**. Dr Sahu's report confirmed *inter alia* that:

27.8.1. the most significant impact will arise from the 4 x 150MW stacks as well as substantial fugitive PM emissions (which includes heavy metals such as lead and cadmium) from handling the coal from the source to the plant as well as ash from the plant to the dumpsite;

27.8.2. the project does not show that there is a need for 150MW, 450MW or 600MW of power for the area, and if it is shown, least environmentally impactful alternatives (such as renewables) should have been considered;

27.8.3. there will be significant health impacts from Khanyisa's emissions, particularly on children of Landau primary school, some 2km away;

27.8.4. the proposed CFB technology is outdated, and a more efficient system would reduce pollution and greenhouse gas emissions from Khanyisa;

27.8.5. the project is in an area that has a compromised air quality, not meeting the AAQS, and thus complying with the AQMP will become "virtually impossible" once Khanyisa becomes operational;

27.8.6. no attempt has been made to address current and future health risks on the population in the Khanyisa Project area [which includes the highly densely populated eMahlaleni]; and

27.8.7. the mitigation measures proposed by ACWA are vague and unsubstantiated, and does not state that it will be run at the most efficient levels.

27.9. As indicated above, despite the HPA having been declared 10 years ago, and having an AQMP in place since 2012, air quality has not improved. According to the 2017 DEA mid-term review, the air quality in the area significantly exceeds the AAQS.[14] This is despite the fact that South African AAQS are significantly weaker than the now outdated guidelines of the World Health Organisation. The review also points out that "*the industrial sources in total are by far the largest contributor of SO_2 and NOx in the HPA,… while mining is the largest contributor of PM_{10} emissions'*.[15]

27.10. The CER's comments on the draft mid-term review pointed out that: it is clear that ambient air quality remains out of compliance with AAQS in the HPA.[16] Subsequent to submitting our comments[17] we have had no further feedback from the DEA as to when the review will be finalised; nor received a copy of any updated midterm review.

27.11. The DEA's October 2017 State of the Air Report presented at its recent Air Quality Lekgotla confirmed that there are ongoing exceedances of AAQS in the HPA, and that "*many South Africans may be breathing air that is harmful to their health and well-being especially in the priority areas".*[18]

27.12. This dire situation, and the devastating impacts of human health and wellbeing, were addressed in the publication of October 2017 entitled "Broken Promises"[19] and in a report

---

[14] https://cer.org.za/wp-content/uploads/2016/07/HPA-AQMP-Midterm-review-Draft-Report_February-2016.pdf
[15] Mid term review, para 5,75-76.
[16] https://cer.org.za/wp-content/uploads/2016/07/CER-preliminary-comments-on-mid-term-review_23-March-2017_final-1.pdf
[17] https://cer.org.za/wp-content/uploads/2016/07/CER-preliminary-comments-on-mid-term-review_23-March-2017_final-1.pdf
[18] http://www.airqualitylekgotla.co.za/assets/2017_1.3-state-of-air-report-and-naqi.pdf, slide 49 (slides 31-36 are of the HPA).
[19] https://cer.org.za/wp-content/uploads/2017/09/HPA-Report-web.pdf; https://cer.org.za/wp-content/uploads/2017/09/Broken-Promises-full-report_final.pdf

by a UK-based air quality and health expert.[20] It is submitted that the issuing of all new AELs in the HPA should be suspended until there is consistent compliance with all NAAQS. In other words, the AEL for the Khanyisa Project should not have been granted, let alone, varied or transferred.

27.13. Even if it were appropriate to introduce yet another polluting facility into the HPA (which is denied), the Appellant points out that all reasonable steps should be taken to minimise and reduce emissions (as addressed in the next section). It is also worth noting that, whilst the 2015 EIR mentions mitigation measures (even if it is vague), the PAEL paragraph 7.1 only makes mention of the use of a bag filters and water sprays in paragraph 7.5. The commission date and manufacture date of the bag filters is "TBD" (presumably "to be decided"), and the fugitive emission management plan must be submitted, within 6 months of PAEL 2015 being granted. The LA should have considered that there are other control measures needed, and should have provided for this in the PAEL. As set out above, the various amendments to the 2017 PAEL should have been subjected to public participation in terms of section 46(3) of AQA.

27.14. Granting a PAEL without the strictest mitigation measures being in place from the date of operation is contrary to NEM principles, s24 of the Constitution, AQA, as well as wholly inappropriate in terms of meeting the HPA AQMP objectives. Doing so without reasonable public participation violates AQA and PAJA.

27.15. In giving effect to the transfer of the PAEL, the LA was obliged to consider if the HPA AQMP was meeting its objectives of ensuring AAQS compliance, after its declaration 10 years ago. It was then obliged to consider how the Khanyisa Project would worsen the HPA air quality, and whether this project was in compliance with the HPA AQMP objectives. As mentioned in Dr Sahu's report, the mitigation measures described in the Khanyisa 2015 EIR are inadequate and further, the Project does not adequately address fugitive emissions. It is clear that any new polluting project will further deteriorate the already degraded HPA, since no mitigation measures can completely eradicate the full emissions and pollutants.

27.16. In the circumstances, in the transfer process the LA should have had due regard to the factors mentioned above, and once considered, it would have been irrational to allow for the 2015 PAEL to be transferred.

---

[20] https://cer.org.za/news/air-pollution-from-coal-power-stations-causes-disease-and-kills-thousands-of-south-africans-every-year-says-uk-expert

Decision does not have due regard to NEMA, the NEM Principles, the Framework, and s 24 of the Constitution

27.17. The LA was not appropriately guided by section 24 of the Constitution or by NEMA, in particular, the following section 2 NEMA Principles, in the transfer process:

27.17.1. that environmental management must place people, and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably;[21]

27.17.2. that there is a responsibility on the State to respect, promote, fulfil the social and economic rights in Chapter 2 of the Constitution (which to an environment not harmful to health or wellbeing);[22]

27.17.3. that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions ("**the precautionary principle**");[23]

27.17.4. that the environment is held in trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage ("**the public trust doctrine**");[24]

27.17.5. that environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons;[25]

27.17.6. that responsibility for the environmental health and safety consequences of policy, programme, project, product, process, services or activity exists throughout its cycle;[26]

27.17.7. that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment ("**the polluter pays principle**");[27]

[21] S2(2)
[22] S2(1)(a)
[23] S2(4)(a)(vii)
[24] S2(4)(o)
[25] S2(4)(c)
[26] S2(4)(e)
[27] S2(4)(p)

27.17.8. that pollution and degradation of the environment should be avoided, or, where they cannot be altogether avoided, are minimised and remedied ("**the preventive principle**");[28]

27.17.9. that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;[29]

27.17.10. that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;[30]

27.17.11. sensitive, vulnerable, highly dynamic or stressed ecosystems such as costal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to human resource usage and development pressure;[31]

27.17.12. that the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured;[32] and

27.17.13. that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.[33]

27.18. In addition to the NEMA principles outlined above, one of the AQA objectives is to give effect to section 24(b) of the Constitution in order to enhance the quality of ambient air for the sake of ensuring an environment that is not harmful to health or well-being of the people. The Framework also recognises that air quality management and planning should take into account the impacts of air quality on human health and the interventions developed should be aimed primarily at minimising the effects of air pollution on the health of people.

27.19. It is submitted that, by default, economic considerations of claimed job creation arising from development are weighed too heavily in the decision-making. However, it is worth

[28] S2(4)(a)(ii)
[29] S2(4)(a)(v)
[30] S2(4)(a)(vi)
[31] S2(4)(r)
[32] S2(4)(f)
[33] S2(4)(a)(viii)

noting that pollution from coal-fired power stations gives rise to economic implications too. For instance, a 2017 study by Dr Mike Holland into the health impacts of coal-fired power generation in South Africa finds that the cost to South Africa associated with air emissions arising out of Eskom coal-fired power stations alone is $2.3 billion annually. This includes a significant number of annual deaths, days off sick, hospitalisation (in government hospitals), and number of illnesses (such as cancer, chronic respiratory illness in adults and children, heart disease etc) from air pollution.[34]

27.20. The LA should have taken into account what the full impact of the transfer would be in relation to the 600MW Khanyisa Project, as this project is a mere 2km from Landau Primary School (which is not indicated in the 2015 and 2017 PAELs) and a mere 10-15km from central and highly densely populated eMalahleni. It should also have had due regard to health impacts and economic consideration of the already burdened public health-care due to illness and deaths arising out of poor air quality, through the PAEL transfer.

27.21. It is submitted that it is inappropriate to licence such an operation which has not yet located ash disposal facilities for the full 600MW plant, and is likely to have further air polluting impacts. The LA therefore is in breach of several NEMA principles outlined above through its authorisation of the PAEL transfer, and failed to take into consideration all relevant factors in the transfer process.

28. In the circumstances, it is submitted that the LA failed to give due regard to NEMA, AQA, the NEMA principles, the Framework, the Constitution, the AAQS, and the HPA AQMP in relation to the Khanyisa AEL transfer. Given the high and dangerous levels of air pollution in the HPA, and the health and economic cost of the negative health impacts associated with poor air quality, the PAEL transfer should **not** have been permitted at all. The transfer – and both PAELs – are invalid.

RESERVATION OF RIGHTS TO SUPPLEMENT APPEAL GROUNDS

29. As set out above, correspondence was sent on 6 November 2017 by the CER to both MDARDLEA and NDM, requesting the full reasons for the transfer and/or variation of the 2017 PAEL, the procedures followed, as well as written proof of the delegation of powers in respect of the 2015 and 2017 PAEL licensing process in terms of PAJA. These reasons have not been received.

[34] https://cer.org.za/wp-content/uploads/2017/04/Annexure-Health-impacts-of-coal-fired-generation-in-South-Africa-310317.pdf **;** https://cer.org.za/wp-content/uploads/2017/09/CER_HPA-Infographic-web.pdf

30. The Appellant therefore reserves its rights to supplement this appeal once the necessary reasons and clarity are received, or after the expiry of the prescribed 90 days for the provision of reasons. The Appellant furthermore reserves its right to appeal the PAEL in its entirety, should it become evident that the 2017 PAEL is in fact a new PAEL issued by NDM and/or was varied without following the prescribed procedures. It is in any event submitted that a new application for a PAEL must be submitted, with the full public participation process, given the substantial changes to the Khanyisa Project since the 2015 PAEL was issued.

CONCLUSION

31. In light of the above it is submitted:

    31.1. that the appeal be upheld and the Municipal Manager's decision to transfer the 2015 PAEL be set aside; and

    31.2. that ACWA be directed to apply for a fresh PAEL for the full 600MW Khanyisa Project with a fresh public participation process. It is submitted that such application should reflect the current 600MW Khanyisa Project and should at least include:

        31.2.1. accurate information about the Khanisa Project, including amongst others: exact co-ordinaries, graphical representation and maps, positions and size of the proposed plant, the size and position of the land, all the point source parameters (condition 6.4.1 of PAEL), and area and/or line source parameters (condition 6.4.2 of PAEL) - which includes fuel and ash conveyors, ash disposal facilities and emissions arising from each source for the current 600MW Khanyisa Project, the full and effective appliances and control measures with commissioning dates from the date of the plant coming into operation, among others;

        31.2.2. a fugitive emission management plan;

        31.2.3. an emission reduction plan; and

        31.2.4. emission information on the disposal facilities for ash arising out of full 600 MW plant; and

        31.2.5. full details for the estimated lifecycle GHG emissions and measures to mitigate these emissions, as part of a full CCIA required for the Khanyisa Project.

32. Alternatively, the Municipal Manager be directed to require public participation to vary the 2017 PAEL to cater for the full 600MW Khanyisa Project which includes 32.2.1-4 above.

33. It is submitted that since ACWA has not yet commenced operation, and is far from obtaining all the necessary environmental licences, ACWA will not be unduly prejudiced if it is required to prepare a fresh PAEL or required to vary the PAEL, with public participation. In any event, any prejudice to ACWA will be wholly outweighed by the prejudice to I&APs, including the Appellant, and their constitutional environmental rights, should the transfer and the PAEL not be set aside.

DATED at CAPE TOWN on this the 13TH day of November 2017.

_____

CENTRE FOR ENVIRONMENTAL RIGHTS
Appellant's attorneys
2nd Floor, Springtime Studios
1 Scott Road
Observatory
Cape Town
7925
Tel: 021 447 1647
Fax: 086 730 9098
Email: rhugo@cer.org.za
mkoyama@cer.org.za
Ref:CER54.2/RH/MMK

AND TO: **NKANGALA DISTRICT MUNICIPALITY**
First Respondent
2A Walter Sisulu Street,
Middelburg
Mpumalanga
Email: skosanamm@nkangaladm.gov.za

AND TO: **CHIEF DIRECTOR: ENVIRONMENTAL AFFIARS**
MPUMALANGA DEPARTMENT OF AGRICULTURE,
RURAL DEVELOPMENT, LAND AND ENVIRONMENTAL AFFAIRS
Building No. 6, 1 & 2nd Floor
Riverside Park, Extension 2
Nelspruit
By email: smaluleka@mpg..gov.za
gmamba@mpg.gov.za
dtswai@mpg.gov.za
jmmabuza@mpg.gov.za

AND TO: **ACWA POWER KHANYISA THERMAL POWER STATION RF (PTY) LTD**
Fourth Respondent
7th Floor,
90 Grayston Drive
Sandton, Gauteng
Email: pgovender@acwapower.com