"ANNEXURE A"

EARTHLIFE AFRICA, JOHANNESBURG **Appellant**

CHIEF DIRECTOR: INTEGRATED ENVIRONMENTAL AUTHORISATIONS, DEPARTMENT OF ENVIRONMENTAL AFFAIRS **First Respondent**

NEWSHELF 1282 (PTY) LIMITED **Second Respondent**

APPEAL PURSUANT TO SECTION 43(2) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AGAINST ENVIRONMENTAL AUTHORISATION GRANTED TO NEWSHELF 1282 (PTY) LIMITED ON 25 FEBRUARY 2015

INTRODUCTION

1. This is an appeal to the Minister of Environmental Affairs, directed at the Director: Appeals and Legal Review of the Department of Environmental Affairs, against the decision of the Chief Director: Integrated Environmental Authorisations of the Department of Environmental Affairs (DEA) to grant an integrated environmental authorisation to Newshelf 1282 (Pty) Ltd for the establishment of a 1200 megawatt (MW) coal-fired power station and associated infrastructure, namely the Independent Power Producer (IPP) Thabametsi power station near Lephalale, Limpopo Province under authorisation register number 14/12/16/3/3/3/40 ("the authorisation").

2. This appeal is lodged in terms of section 43(1) of the National Environmental Management Act, 1998 (NEMA), which provides that "*any person may appeal to the Minister against the decision taken by any person acting under a power*

delegated by the Minister under [NEMA] *or a specific environmental management act*."

PARTIES

3. The appeal is submitted by Earthlife Africa Johannesburg ("the appellant"). The appellant was founded in 1988 to mobilise civil society around environmental issues in relation to people, and is a membership organisation, with currently approximately 100 members, lead by a Core Group which serves as its management committee.

4. The appellant challenges environmental degradation and aims to promote a culture of environmental awareness and sustainable development. It also seeks to improve the quality of life of vulnerable people in South Africa through assisting civil society to have a greater impact on environmental governance by understanding and defending their constitutional rights, specifically those enshrined in section 24 of the Constitution. The appellant is a registered interested and affected party (I&AP) in respect of the application process for this authorisation.

5. The first respondent is the Chief Director: Integrated Environmental Authorisations ("the first respondent"), cited herein in his official capacity as the person who signed the authorisation on 25 February 2015, and the subsequent amendment thereto on 17 March 2015.

6. The second respondent is Newshelf 1282 (Pty) Limited, the applicant in respect of the project and holder of the environmental authorisation that is the subject of this appeal is Newshelf 1282 (Pty) Limited ("Newshelf"). No record of Newshelf 1282 (Pty) Ltd can be found on the Companies and Intellectual Properties Commission (CIPC) online register. A copy of the CIPC company search result is attached as annexure **1**. The appellant requests to be furnished with a copy of Newshelf's registration number and registered address.

BACKGROUND

The Project

7. The background for this appeal stems from the Integrated Resource Plan for Electricity 2010-2030[1] (IRP) developed by the Department of Energy (DOE) to determine South Africa's long-term electricity demand and to detail how this demand should be met. It stated that a mix of generation technologies, including 6.3 gigawatts (GW) of coal, would be required to meet South Africa's energy demands. The IRP was promulgated in March 2011, and it was indicated at the time that the IRP should be a "living plan" which would be revised by the DoE every two years, meaning that an update was required by 2013 (the IRP itself indicates that it would be revised in 2012). Although an IRP update report was published for comment in 2013, it appears to have been abandoned.[2]

8. Flowing from the IRP, the Minister of Energy, in December 2012, announced determinations regarding the expansion of electricity generation capacity by independent power producers (IPPs). The first part of the determination was for additional renewable energy generation capacity following on from a determination of August 2011, while the second part of the determination[3] was for additional base-load generation capacity of 7 761MW, comprising 2 500 MW of energy from coal for connection to the grid between 2014 and 2024, with the remainder coming from gas power and imported hydro power.[4] The electricity produced was to be procured through one or more IPP procurement programmes[5] and the electricity must be purchased from the IPPs by Eskom Holdings SOC Limited (Eskom).[6] The Coal Baseload Independent Power Producer Programme (CBIPP) was one of the initiatives developed by national

[1] GN 400 of 6 May 2011 Government Gazette no 34263.
[2] In addition, although a draft 2012 Integrated Energy Plan was published for comment in 2013, it was not finalised.
[3] Part B, Government Notice 1075, Government Gazette no 36005 of 19 December 2012. Paragraph 1 states that baseload energy generation capacity is needed to contribute towards energy security, including 2500MW to be generated from coal, which is in accordance with the capacity to be allocated to coal under the heading "new build" for the years 2014 to 2024 in table 3 of the IRP for electricity 2010-2013.
[4] https://www.ipp-coal.co.za.
[5] Paragraph 4, Part B, Determination under section 34(1) of the Electricity Regulations Act 4 of 2006, Government Notice 1075, Government Gazette no 36005 of 19 December 2012.
[6] Paragraphs 10 and 11, Part B, Determination under section 34(1) of the Electricity Regulations Act 4 of 2006.

government, which argued that the CBIPP would alleviate the constraints in electricity supply within the country. The CBIPP will comprise separate bid windows. According to the 15 December 2014 request for qualifications and proposals: the first bid submission date is 8 June 2015; projects submitted in this first bid phase must be capable of beginning commercial operation by December 2021; and each project must have a contracted capacity of not more than 600MW.

9. Flowing from the above, an application was made, and authorisation subsequently granted, to Newshelf 1282 (Pty) Ltd for the construction of a 1200MW coal-fired power station and associated infrastructure, the IPP Thabametsi power station near Lephalale in the Limpopo Province (DEA reference number 14/12/16/3/3/3/40) ("the project"). It is noted that the authorised project capacity of 1200MW exceeds the abovementioned CBIPP capacity limit by 600MW.

10. The site of the project ("the project site") is situated in the Lephalale Local Municipality, which falls under the Waterberg District Municipality in the Limpopo province. The project site falls within the Waterberg coalfields. It is noted that Exxaro Resources Limited ("Exxaro") has been granted authorisation to develop a coal mine, the Thabametsi coal mine, which, it is envisaged, will supply the Thabametsi power station with coal.

11. The site is located in close proximity to the Grootgeluk mine. Two coal-fired power stations, namely Medupi power station (soon to be commissioned) and Matimba power station, are situated within 15km of the project site. In addition, other mining and power generation projects are proposed within the broader area, as the project site is located within the Limpopo Coal, Energy and Petrochemical cluster, the Lephalale Local Municipality Industrial Corridor and the Waterberg coalfields.

12. The towns of Marapong, Onverwacht and Lephalale are in close proximity, all located less than 25km from the project site, and it is recorded that the Lephalale Local Municipality has an average population density of 4.7 people per km^2.

Water Sources within the Project Site Area

13. The water needs of the abovementioned towns, industries and mines are predominantly supplied by the Mokolo Dam and Crocodile River. The Waterberg is known to be a water-stressed area, with Lephalale, in particular, suffering from a water deficit.[7]

14. The Mokolo and Crocodile Water Augmentation Project (MCWAP) is a project initiated by the Limpopo Regional Office of the Department of Water and Sanitation (LDWAS) to supply industry and residents in the Waterberg district with water. It entails the phased construction of two bulk raw water transfer systems, as well as associated infrastructure, to meet power station, mines, and domestic water demands.

15. Phase 1 of the MCWAP ("MCWAP 1") deals with increased transfer capacity from Mokolo Dam to Eskom's Matimba and Medupi power stations, Lephalale Local Municipality and Exxaro Coal. The completion of MCWAP 1 will allegedly allow for the full abstraction of the unused yield from the dam for allocation. The second phase of the MCWAP project ("MCWAP 2") will supply additional water to the area, thereby reducing the deficit for development. This phase is planned to include the establishment of a transfer scheme from the Crocodile River (West) at Vlieëpoort near Thabazimbi to the Lephalale area,[8] and it is envisaged that MCWAP 2 will commence supplying water in November 2020.[9]

16. This project will fall within the ambit of the MCWAP. It is intended that the water for the project will ultimately be sourced from MCWAP 2, but will initially, for the first phase of the project, be sourced from Exxaro's allocation from MCWAP 1.[10]

17. It is noted that the requisite environmental impact assessment for MCWAP 2 has not yet been completed. In the circumstances, given the various steps that still

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[7] http://trialogue.co.za/water-together-sustainability-review-issue-12-may-2013.
[8] Pages 191 -192, FEIR, May 2014.
[9] http://www.infrastructurene.ws/2014/10/17/water-project-awaits-financial-guarantees.
[10] Pages 50 and 106, Annexure D2: Comments and Responses Report, Final Environmental Impact Report, May 2014.

need to be taken before MCWAP 2 can commence, it is unlikely that the envisaged deadline for completion by the year 2020 will be met.

Air Quality within the Project Site

18. The site of the project falls within the Waterberg-Bojanala Priority Area (WBPA).[11] Section 18(1) of the National Environmental Management: Air Quality Act, 2004 (AQA) provides for the declaration of an area as a priority area if the MEC or Minister reasonably believes that:

    18.1. ambient air quality standards (AAQS) are being, or may be, exceeded in the area, or any other situation exists which is causing, or may cause, a significant negative impact on air quality in the area; and
    18.2. the area requires a specific air quality management action to rectify the situation.[12]

19. A priority area air quality management plan (AQMP) must be developed to: co-ordinate air quality management (AQM) in the area; address air quality issues; and provide for its implementation by a committee representing relevant role-players.[13]

20. The aim of declaring priority areas is to target limited AQM resources to the areas that require them most.[14] Once an AQMP is implemented, air quality in the area should - within agreed timeframes - be brought into sustainable compliance with AAQS.[15] AQA provides[16] that the Minister may withdraw the declaration of an area as a priority area if the area is in compliance with AAQS for a period of at least two years.

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[11] Declared in terms of section 18(1) AQA by Government Notice 495 of 2012.
[12] S.18(1).
[13] s.19(1)-(5), (6)(b).
[14] "Priority areas under the Air Quality Act" Engineering News Online 3 June 2011, available at http://www.engineeringnews.co.za/print-version/priority-areas-under-the-air-quality-act-2011-06-03.
[15] "Deputy Minister of Water and Environmental Affairs launches Waterberg-Bojanala priority area" 20 July 2012, available at http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=29236&tid=77119.
[16] S.19(5).

21. The air quality within the Waterberg-Bojanala area, and consequently within the project area, is a matter of serious concern, with industries, including coal-fired power stations, emitting pollutants such as sulphur dioxide (SO2), nitrous oxides (NOx), and particulate matter (PM). Coal-fired power stations also emit significant quantities of other harmful pollutants such as carbon dioxide (C02) (which is also a greenhouse gas that contributes directly to global warming) and mercury. Although the intended AQMP for the WBPA is still in draft format, its goals include:

    21.1. emission control and reduction across all sectors to ensure that there is compliance with the national AAQS in the WBPA;[17]

    21.2. addressing the shortcomings in cooperative governance by ensuring the appropriate structures and mechanisms are in place at the respective levels of governance for effective implementation of the AQMP;[18] and

    21.3. that air quality decision making in the WBPA is informed by sound research. This requires that appropriate research establishes the health baseline, which improves the threat assessment and prioritises emission reduction interventions to inform air quality management and planning in the WBPA.[19]

22. In addition, the draft WBPA AQMP Threat Assessment on the WBPA ("the threat assessment")[20] stipulates that, *"[t]he greatest potential threat to ambient air quality exists in the Waterberg District Municipality through the planned expansion of energy-based projects and coal mining in the district ... The planned development poses a threat to human and environmental health in the region and it poses challenges for air quality management in the region*."[21]

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[17] Page 11, Part 4, The Waterberg-Bojanala Priority Area Draft Air Quality Management Plan. www.saaqis.org.za/filedownload.aspx?fileid=1139 .

[18] Page 11, Part 4 The Waterberg-Bojanala Priority Area Draft Air Quality Management Plan. www.saaqis.org.za/filedownload.aspx?fileid=1139 .

[19] Page 11, Part 4, The Waterberg-Bojanala Priority Area Draft Air Quality Management Plan. www.saaqis.org.za/filedownload.aspx?fileid=1139 .

[20] Available at www.saaqis.org.za/filedownload.aspx?fileid=1137.

[21] Page 2. Annexure A2 , Waterberg Bojanala Priority Area Draft AQMP Threat assessment, 24 April 2015.

23. The threat assessment goes on to state that: "*in 2020 the Thabametsi Power Station becomes operational with three new IPP power stations (Boikarabelo, Unknown IPP and Greenfields), supported by four new coal mines and the Total* [sulphur dioxide] *emissions increase from 2015 by 236 131 t/a,* [nitrous oxide] *by nearly 122 000 t/a and* [particulate matter 10] *by 2 649 t/a*."[22]

24. An additional coal-fired power station, with all of its significant and harmful atmospheric emissions, will clearly be contrary to the air quality management intentions for the WBPA and the goals of the draft AQMP.

THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

25. It is noted that the application for environmental authorisation was submitted by Exxaro Resources Limited, a public company registered in terms of the laws of the Republic of South Africa with registration number 2000/011076/06. The final environmental impact assessment report records that "*this project was previously presented by Exxaro Resources, who subsequently selected the project company as a preferred IPP for the development of a power station*".[23]

26. A power point presentation from a pre-feasibility meeting to discuss the water use licence for the project - the draft minutes, including the powerpoint presentation, are attached hereto as annexure **2** - depicts the shareholding in Newshelf, as follows:

    26.1. GDF Suez Energy International Global Developments (Pty) Ltd ("GDF Suez") - 24.5%;
    26.2. Axia Power Holdings B.V - 24.5%; and
    26.3. Unnamed "*RSA Owned and BBBEE Company*" - 51%.[24]

[22] Page 24, Annexure A2, Waterberg Bojanala Priority Area Draft AQMP Threat assessment, 24 April 2015.
[23] Page ii, Final Environmental Impact Report, May 2014.
[24] Page 2, Annexure 3, Draft Minutes of the Pre-Feasibility Meeting.

27. It is noted that GDF Suez forms part of a French multinational group of companies, now operating under the name Engie, which is apparently partly owned by the French government. Engie specialises in IPP, in particular, renewable energy projects, and cites itself as "*a global energy player and an expert operator in the three key sectors of electricity, natural gas and energy services. The Group supports changes in society that are based as much on economic growth as on, social progress and the preservation of natural resources*."[25]

28. It is noted further that Sanjith Mungroo ("Mr Mungroo"), Head of Business Development for GDF Suez, is cited as the contact for Newshelf in the authorisation, and that he appears to be a director of Newshelf, along with Vincent Perrot and Francois Chaptal.[26]

29. Savannah Environmental (Pty) Limited ("Savannah") was appointed as the independent environmental assessment practitioner (EAP) for the project, "*to undertake the required scoping and EIA process to identify and assess all the potential environmental impacts associated with the proposed project and propose appropriate mitigation and management measures in an Environmental Management* Programme".

30. It is noted that the authorisation is an integrated authorisation in terms of the NEMA Environmental Impact Assessment Regulations, 2010; NEMWA; and Government Notice 921 of 2013 (the listed activities published under NEMWA). The authorisation therefore also effectively serves as a waste management licence (WML) in terms of NEMWA. Submissions regarding the authorisation of waste management activities, in terms of NEMA and NEMWA, are made below.

31. It is submitted that the appellant first became aware of the application process on publication of the draft EIA. The appellant has not been given access to a

[25] http://www.gdfsuez.com/en/group/summary.
[26] Page 106, Annexure D2: Comments and Responses Report, Final Environmental Impact Report, May 2014.

copy of the Scoping Report and, consequently, did not have an opportunity to make representations thereon.

32. On 23 April 2014, the appellant submitted comments on the Draft Environmental Impact Assessment Report for the proposed Independent Power Producer Thabametsi Power Station near Lephalale ("the draft EIA") ("submissions on the draft EIA"), which submissions are attached hereto as annexure **3**. In the submissions on the draft EIA, the appellant motivated that the draft EIA be rejected or, failing this, that the draft EIA be sent back to the consultants for amendment, for some of the following reasons:

    32.1. lack of clarity regarding the water supply for the project from the MCWAP phase 1;[27]
    32.2. that the sourcing of water and water treatment for the project should not be left for the operational phase;[28]
    32.3. the report failed to specify alternatives to ash disposal, and it was specifically requested in the submissions on the draft EIA that the alternative of disposal of ash as a backfilling operation in the mine be addressed;[29] and
    32.4. the report failed to address numerous environmental impacts, including the cumulative impacts of the project.[30]

33. The Final Environmental Impact Report (FEIR) was submitted by Savannah to the DEA in May 2014.

34. Notifications of the EIA application process in respect of the project were sent to various government departments.

35. The South African Heritage Resources Agency (SAHRA), an agency of the Department of Arts and Culture, submitted a report titled 'Interim Comment' on 12 May 2014, which appears to comment on the archaeological impact

[27] Paragraph 2, page 2, Earthlife Africa submissions on draft EIA.
[28] Paragraph 10, page 3, Earthlife Africa submissions on the draft EIA.
[29] Page 2, Earthlife Africa submissions on draft EIA.
[30] Paragraphs 11 – 17, pages 3-5 Earthlife Africa submissions on draft EIA.

assessment included in the FEIR, and make recommendations. This is addressed below.

STATUS OF OTHER AUTHORISATION PROCESSES

36. The activities that form part of the project will have impacts which are regulated by specific environmental legislation in addition to NEMA, these being the National Environmental Management: Waste Act, 2008 (NEMWA), AQA and the National Water Act, 1998 (NWA). It is therefore necessary that the provisions and licensing processes provided for in this legislation be fully complied with, in addition to the processes prescribed by NEMA.

37. Chapter 5 of NEMA provides for an integrated environmental management system to, inter alia, streamline the authorisation process and promote the integration of the principles of environmental management set out in section 2, into the making of all decisions which may have a significant effect on the environment.[31] Section 24L(1) of NEMA makes provision for the issuing of an integrated environmental authorisation, and section 24L(2) stipulates that an integrated environmental authorisation may only be issued if "*the relevant provisions of …* [NEMA] *and the other law or specific environmental management Act have been complied with*".

38. In addition to the environmental authorisation addressed herein, Newshelf will be required to obtain a water use licence (WUL) in terms of NWA and an atmospheric emission licence (AEL) in terms of AQA, in order to undertake many of the activities envisaged as part of the project.

39. In its submissions on the draft EIA (annexure 3), the appellant recorded that it required the opportunity to participate in all of the processes for the AEL; WML and WUL and to be kept informed of their progress.[32]

[31] Section 23(2)(a) NEMA.
[32] Paragraph 4, page 2, submissions on the draft EIA.

40. The WUL

40.1. The appellant is advised that the WUL process is about to commence.

40.2. It was advised that a pre-feasibility meeting in relation to the WUL application took place on 20 February 2015, attended by representatives from GDF Suez and Exxaro Resources in relation to the project, M2 Environmental Connections CC ("Menco") the appointed consultants in relation to the WUL process, and the LDWAS, as the regulatory authority in this matter, to discuss the necessary requirements for the integrated WUL application process (IWULA) and to determine applicable timeframes within which to submit and evaluate the IWULA ("the IWULA pre-feasibility meeting") The draft minutes and enclosed power point presentation referred to above, are attached hereto as annexure 2. The points discussed in this meeting in relation to the water use for the project are addressed in the grounds of appeal below.

40.3. In the minutes for the IWULA pre-feasibility meeting, it is recorded that an application that is complete and acceptable must be submitted to the LDWAS on or before 31 May 2015.[33]

40.4. As appears from annexure **4**, attached hereto; the appellant was advised by Menco, on 4 May 2015, that:

40.4.1. a draft integrated waste water management plan (IWWMP) is in the process of being updated;

40.4.2. a section 25(2) application is being prepared for the surrender of 720 000 m^3 /annum raw water from the allocation made to Exxaro Resources under licence 01/A42G/A/A/643 dated 28 October 2011;

40.4.3. LDWAS forms are being completed for water uses including the taking of water;[34] storing of 120 000 (unit of measurement unconfirmed) raw water in a reservoir";[35] "altering the natural characteristics of watercourses in terms of the construction of 18

[33] Page 5, annexure 3 (IPP Thabametsi Power Plant Meeting Presentation), Draft Minutes of the IWULA Pre-feasibility Meeting.
[34] Section 21(a) National Water Act, 1998.
[35] Section 21(b) National Water Act, 1998.

km pipeline from the Exxaro pipeline to the project site";[36] "disposal of water containing waste that may detrimentally impact on a water resource;[37] and discharging of water containing waste/disposing of water which had been heated in a power generation process;[38]

40.4.4. various waste-related activities will be covered, such as the ash dump, stormwater system, station drains and coal stockyard;

40.4.5. the ash dam has already obtained a WML (dated 25 February 2015) under reference DEA 14/12/16/3/3/3/40;

40.4.6. a tentative date has been set with the LDWAS for 20 May 2015, during which time the IWWMP will be presented to them; and

40.4.7. it was envisaged that the application would be made available for public comment in/or about the next 5 working days (the appellants point out that this date would have been 8 May 2015). To date, no such applications have been brought to the appellant's attention.

40.5. However, given the serious water constraints and other water-related concerns highlighted in this appeal, it is submitted that granting the intended authorisation would be contrary to the NWA objectives of ensuring that the nation's water resources are protected, used, developed conserved, managed and controlled in a way that meets the basic human needs of present and future generations, promotes equitable access to water and, inter alia, efficient, sustainable and beneficial use of water in the public interest.[39]

41. <u>The AEL</u>

41.1. An application for an AEL was apparently submitted to the Limpopo Department of Economic Development, Environment and Tourism

[36] Section 21(c) and (i) National Water Act, 1998.
[37] Section 21(g) National Water Act, 1998.
[38] Section 21(f/h) National Water Act, 1998.
[39] Section 2(a), (b) and (d) NWA.

(LEDET), as the relevant licensing authority in terms of AQA, in July 2014.

41.2. In terms of section 40(3) AQA, "*If the decision on the relevant application for an environmental authorisation has been made in terms of section 24 of the National Environmental Management Act, the licensing authority must decide the application within 60 days of the date on which the decision on the application for the environmental authorisation has been made*." However, the appellants submit that no AEL can be granted whilst an appeal of the authorisation is pending.

41.3. The appellant was not notified of the applicant's application for an AEL, despite its status as an interested and affected party and the obligation on Newshelf to notify all IAPs in terms of s37(3)(a) of AQA - which requires an applicant to "*take appropriate steps to bring the application to the attention of relevant organs of state, interested persons and the public*."

41.4. The first notification of the AEL application was received on 5 March 2015 by the appellant's attorneys, the Centre for Environmental Rights (CER), after CER requested information on behalf of the appellant, by email, on the AEL status from Savannah.

41.5. Savannah advised that, in terms of the process which they were advised to follow by LEDET - as the relevant licensing authority for the AEL - they advertised the intention to apply for an AEL in The Star on 22 July 2014; the Mogol Pos on 25 July 2014; and Ntshebele Rural Rhythm on 25 July 2014, and afforded interested parties 14 days to comment. According to Savannah, the requirement for the permit was included within the EIA for the IPP Thabametsi Power Station, and the relevant activity was applied for and assessed.

41.6. CER, in response, placed on record that the appellant disputed that 14 days was a "*reasonable period*" for comment, as envisaged and required by section 38(3)(b)(iii) AQA. The appellant reserves its rights in this regard. The appellant also disputes, as will appear below, that the requirement for the permit was included within the EIA for the IPP Thabametsi Power Station, and that the relevant activity was

adequately applied for and assessed. The correspondence between Savannah and the CER is attached as annexure **5**.

41.7. On 23 April 2015, CER followed up with LEDET to obtain information on the status of the AEL application. On 24 April 2015, CER was notified, by email, that "*the application form for the …project contains insufficient information, and the process is still on hold pending submission of additional information*." This correspondence is attached as annexure **6**.

41.8. The appellant again points out that the AEL application cannot be further processed until the present appeal is fully disposed of. It reserves its right to challenge any AEL that is granted in the circumstances set out above.

THE DECISION

42. The decision to authorise the listed activities in terms of the Environmental Impact Assessment Regulations published under Government Notice R543 in Government Gazette No. 33306 of 18 June 2010 in terms of NEMA ("the EIA regulations, 2010") and the NEMWA listed activities was made by the Chief Director: Integrated Environmental Authorisations of the DEA on 25 February 2015.

43. The authorisation was made subject to a range of conditions listed in section 17 thereof.

44. Notice of the authorisation was given to stakeholders, including the appellant, on 9 March 2015. The appellant was provided with this notice, dated 9 March 2015, by email ("the notification"). The notification is attached hereto as annexure **7**.

45. Savannah advised the appellant that notification of the authorisation was published in the Star, on 9 March 2015, and in the Mogol Pos on 13 March 2015, as required by section 4.3 of the authorisation.

46. It was noted that the authorisation was incorrect in certain respects in that it:

46.1. prescribed appeal procedures in terms of the EIA regulations, 2010 as opposed to the NEMA National Appeal Regulations of GN R993 ("the National Appeal Regulations"). Chapter 7 of the 2010 EIA regulations was repealed by the Environmental Impact Assessment Regulations, 2014 of GN 733 of 2014 ("the EIA Regulations, 2014");[40] and

46.2. provided, incorrectly, that an appeal does not suspend an environmental authorisation.[41] This is in direct contravention of section 43(7) of NEMA.

47. As a result of the above, the authorisation and consequently the notification were incorrect.

48. The CER addressed and sent a letter to the first respondent and to Savannah on 12 March 2015, pointing out the errors in the respective authorisation and the notification. The letter is attached as annexure **8**.

49. The National Appeal regulations were subsequently amended by the National Appeal Amendment Regulations published under Government Notice R205 in Government Gazette No. 38559 of 12 March 2015 in terms of NEMA ("the amended Appeal Regulations"). The amended Appeal Regulations stipulate, inter alia, that an appeal lodged after 8 December 2014 against a decision taken in terms of the EIA Regulations, 2010 must, despite the repeal of those regulations, be dispensed with in terms of the EIA Regulations, 2010 as if they had not been repealed.[42]

50. As a result of the above amendment, an appeal of the authorisation would now have to follow the appeal process as provided for in the EIA regulations, 2010,

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[40] Section 4 (Notification of Authorisation and Right to Appeal) of the environmental authorisation dated 25 February 2015.
[41] Section 10.2 (Commencement of Activities) of the environmental authorisation dated 25 February 2015.
[42] Regulation 3 of the amended Appeal Regulations, GN R. 205 of 12 March 2015.

and not the National Appeal Regulations as would have been the case prior to the amended Appeal Regulations.

AMENDMENT OF THE AUTHORISATION

51. Regulation 38(2) of the NEMA EIA regulations, 2010 provides that:

"*An environmental authorisation may be amended-*

(a) on application by the holder of the authorisation in accordance with Part 1 of this Chapter; or

(b) on the initiative of the competent authority in accordance with Part 2 of this Chapter."

52. As no application for an amendment was made by Newshelf in this instance, the amendment could be said to fall within regulation 38(2)(b) above, and must therefore comply with the requirements of regulation 44, which stipulates that:

"44(1) If a competent authority intends amending an environmental authorisation in terms of regulation 43, the competent authority must first-

(a) notify the holder of the environmental authorisation, in writing, of the proposed amendment;

(b) give the holder of the environmental authorisation an opportunity to submit representations on the proposed amendment, in writing; and

(c) if necessary, conduct a public participation process as referred to in regulation 54 or any other public participation process that may be appropriate in the circumstances to bring the proposed amendment to the attention of potential interested and affected parties, including organs of state which have jurisdiction in respect of any aspect of the relevant activity.

(2) The process referred to in subregulation (1) must afford an opportunity to-

(a) potential interested and affected parties to submit to the competent authority written representations on the proposed amendment; and

(b) the holder of the environmental authorisation to comment on any representations received in terms of paragraph (a) in writing.

(3) Subregulation (1)(c) need not be complied with if the proposal is to amend the environmental authorisation in a non-substantive way."

53. It is not known whether the first respondent took steps listed in subsections (1)(a) and (b), but the first respondent failed to take any of the above steps listed in subsection (2) in attending to the amendment of the authorisation.

54. Regulation 45 regulates the steps to be taken once a decision has been made on an amendment and provides that:

"*(4) The competent authority must, in writing, within 12 days of the date of the decision-*
(a) notify all registered interested and affected parties, if any, of-
(i) the decision;
(ii) the reasons for the decision;
(b) draw the attention of all registered interested and affected parties, if any, to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of these Regulations, if such appeal is available in the circumstances of the decision, and
(c) draw the attention of all registered interested and affected parties, if any, to the manner in which they could access the decision."

55. An amended integrated environmental authorisation was issued on 17 March 2015 and was made available to the appellant by Savannah on the same day through a notification confirming the amendment of the authorisation, attaching the amended authorisation and confirming that any appeal against the decision to amend the authorisation must be submitted by 9 April 2015. A copy of the notification is attached as annexure **9**.

56. The amended authorisation was not advertised in terms of regulation 54(2)(c) of the EIA Regulations, 2010.

INTENTION TO APPEAL

57. Regulation 60(1) of the EIA Regulations, 2010 states that a notice of intention to appeal must be submitted to the MEC within 20 days after the date of the decision.

58. Regulation 60(3) of the EIA Regulations, 2010 provides that the appellant must give the applicant notice of its intention to appeal by providing it with a copy of its notice of intention to appeal within 10 days of dispatching this notice to the MEC as contemplated in regulation 60(1), and indicating where and for what period the appeal submission will be available for inspection by the applicant.

59. As the authorisation was amended and this decision was made on 17 March 2015, the appellant's notice of intention to appeal was due 9 April 2015.

60. On 9 April 2015, a notice of intention to appeal ("the notice"), addressed to the DEA was submitted, by email to Mr Z Hassam, Director: Appeals and Legal Review of DEA. The notice specifically provided that "*In relation to the regulation 60(3) requirements of the EIA 2010 Regulations to inform the applicant where and for what period the appeal submission will be available for inspection by the applicant, we will furnish the applicant directly with a copy of* [its] *appeal submissions, thereby rendering it unnecessary to give notice of the time and place for an inspection of the appeal submissions*."

61. The notice was also sent, by email, to Mr Mungroo in accordance with the requirements of regulation 60(3)(a) of the EIA Regulations, 2010, on 9 April 2015 and to Gabriele Wood of Savannah. A copy of this email is attached as annexure **10**.

62. On 10 April 2015, Mmatsasi Maboko of the DEA confirmed receipt of the notice and advised that the appeal submissions were due on 11 May 2015. Despite the appellant's contention that the deadline for the submission of the appeal grounds is in fact 13 May - due to a difference in interpretation of the provisions of regulation 1(2) of the EIA Regulations, 2010 - it agreed to submit the appeal

on 11 May 2015. However, the appellant reserves its rights to dispute the interpretation of regulation 1(2) and the deadline date calculation in the future. A copy of this email correspondence is attached as annexure **11.**

63. Next, the appeal grounds are addressed.

GROUNDS OF APPEAL

64. It is the appellant's submission that the decision to grant environmental authorisation to Newshelf for the project must be set aside by the Minister for the following reasons, which are set out in more detail below:

64.1. The first respondent failed to comply with section 24 of the Constitution[43] and the provisions of NEMA - which failure is, in itself, a contravention of section 24O(1)(a) of NEMA - by:

64.1.1. failing to apply the principles of national environmental management set out in section 2 of NEMA; and

64.1.2. failing to give effect to the general objectives of integrated environmental management laid down in Chapter 5 of NEMA;

64.1.3. failing to take into account all relevant factors as required by section 24O(1)(b) of NEMA; including the failure to take into account:

64.1.3.1. any feasible and reasonable alternatives to the activity and any feasible and reasonable modifications or changes to the activity that may minimise harm to the environment - s24O(1)(b)(iv);

64.1.3.2. comments received from organs of state that have jurisdiction over any aspect of the activity which is the subject of the application – s24O(1)(b)(vii) and s24O(1)(c); and

[43] The Constitution of the Republic of South Africa, 108 of 1996.

64.1.3.3. guidelines, departmental policies and decision making instruments that have been developed or any other information in the possession of the competent authority that is relevant to the application – s24O(1)(b)(viii).

64.2. The first respondent failed to take into account the air quality impacts of the project.

64.3. The first respondent failed to adequately take into account the cumulative impacts of the project and additional industrial and other activities in the area.

64.4. The first respondent failed to take into account the state's international and national obligations to mitigate and take positive steps against climate change.

64.5. The conditions of the environmental authorisation are vague and unenforceable.

64.6. The first respondent's granting of the environmental authorisation constitutes administrative action which materially and adversely affects the rights and legitimate expectations of interested and affected parties and which must therefore comply with the Promotion of Administrative Justice Act, 2000 (PAJA). The Appellant submits that the administrative action does not comply with the provisions of PAJA, by virtue of:

64.6.1. its unlawfulness;

64.6.2. the fact that irrelevant factors were taken into account and relevant factors not considered;

64.6.3. the fact that the decision is not rationally connected to the information before the first respondent in making the decision or to the reasons given for it by the first respondent; and

64.6.4. the fact that the decision is so unreasonable that no reasonable person could have granted the environmental authorisation.

First Ground of Appeal: The First Respondent Failed to Comply with Section 24 of the Constitution and the Provisions of NEMA

65. The first respondent failed to comply with Section 24 of the Constitution and the provisions of NEMA through:

65.1. **Failing to apply the principles of national environmental management set out in section 2 NEMA**

65.1.1. Section 2 of NEMA sets out the environmental management principles that must "*serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of* [NEMA] *or any statutory provision concerning the protection of the environment*" and must "*guide the interpretation, administration and implementation of* [NEMA], *and any other law concerned with the protection or management of the environment*."

65.1.2. The first respondent was therefore under an obligation to have regard to the provisions of section 2 addressed herein in making the decision in respect of the authorisation.

65.1.3. Section 2(2) NEMA stipulates 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*".

65.1.4. In this regard, reference is had to the wealth of evidence regarding the significant health impacts of coal fired power stations.[44] A recent report on the health impacts and social

[44] For example: Business Enterprises University of Pretoria. 29 September 2001, "The external cost of coal-fired power generation: The case of Kusile", at: http://www.greenpeace.org/africa/Global/africa/publications/coal/FULL%20SCIENTIFIC%20PAPER%20139%20pages.pdf ;
Swanson, H. 2008, "Literature review on atmospheric emissions and associated environmental effects from conventional thermal electricity generation", at:
http://www.hme.ca/reports/Coal-fired_electricity_emissions_literature_review.pdf
Cropper, M et al. 2012, "The Health Effects of Coal Electricity Generation in India" Resources for the Future June 2012, at:
http://www.hks.harvard.edu/m-rcbg/rpp/RFF-DP-12-25.pdf.

costs of coal-fired power stations concluded that atmospheric emissions from coal-fired power stations "*are currently causing* an *estimated 2,200 premature deaths per year, due to exposure to fine particulate matter (PM2.5). This includes approximately 200 deaths of young children. The economic cost to the society is estimated at 30 billion rand per year, including premature deaths from PM2.5 exposure and costs from the neurotoxic effects of mercury on children."*[45]

65.1.5. The aforementioned study evidences that, in addition to the detrimental health impacts which the project would give rise to – which constitute a violation of section 24 of the Constitution of the Republic of South Africa, 1996 – additional expenses are incurred by people living in close proximity to power stations. These are generally low-income settlements, and this will give rise to further impacts upon their physical, psychological, developmental, cultural and social interests. This is contrary to the following NEM Principle:

"*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*".[46]

65.1.6. Section 2(3) of NEMA requires that development be socially, environmentally and economically sustainable and section 2(4) of NEMA provides that:

"*sustainable development requires the consideration of all relevant factors including, but not limited to, the following:*

Penney, S et al. 200913
"Estimating the Health Impacts of Coal-Fired Power Plants Receiving International Financing" Environmental Defense Fund, at:
http://www.edf.org/sites/default/files/9553_coal-plants-health-impacts.pdf
Pacyna, J et al. 2010, "An assessment of costs and benefits associated with mercury emission reductions from major anthropogenic sources". J Air Waste Manag Assoc 60 (3): 302-315.

[45] 79 Bellanger, M et al. 2013, "Economic benefits of methylmercury exposure control in Europe: Monetary value of neurotoxicity prevention" Environ Health. 2013; 12:3. available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3599906.

[46] S2(4)(c).

(a) that the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;…

(b) 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; and

(c) that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot altogether be prevented, are minimised and remedied."

65.1.7. It is noted that the 'positive effects' of the project listed in the FEIR are "*an increase in national electricity, economic development, job creation, increase in household income and government revenue.*"[47]

65.1.8. However, as is detailed below, many such 'positive effects' rarely materialise. In any event, the establishment of another coal-fired power station is not a feasible solution to South Africa's current and even immediate energy needs, which would be much better addressed through securing renewable energy as a healthier and long-term, more cost-effective source of energy that can come online much more quickly than a coal-fired power station.

65.1.9. It is submitted that the proposed activity is not socially, environmentally or economically sustainable as it would:

65.1.9.1. negatively impact on the health of communities living in the vicinity, which would be directly attributable to the anticipated atmospheric emissions of pollutants such as PM, including dust, SO2 and mercury by the power station;

[47] Executive Summary: Socio-economic impacts, FEIR, May 2014.

65.1.9.2. result in additional medical and other expenses being incurred by affected communities and the state;

65.1.9.3. irreparably impact upon the limited and scarce water resources in the area (impacts, which are predicted to worsen as a result of the impacts of climate change);

65.1.9.4. irreparably impact upon heritage resources and biodiversity existing on the proposed site;

65.1.9.5. despite this, result in relatively few employment opportunities during the operational phase of the project for only a limited period of time, namely the limited life-time of the power station; and

65.1.9.6. negatively impact upon the economy in the medium to long-term, given the global trend towards divestment in coal and other fossil-fuels[48] and towards investment in renewable energy sources.

65.1.10. It is submitted that the authorisation also violates section 2(4)(b) of NEMA, which requires as follows: "*environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option*". The best practicable environmental option (BPEO) is that "*option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term*".[49]

65.1.11. Coal-fired power stations are particularly polluting and fall far short of being the BPEO, especially when their health impacts, and South Africa's climate change commitments are considered.

[48] http://blueandgreentomorrow.com/2015/03/17/un-backing-fossil-fuel-divestment-campaign.
[49] Section 1(1).

65.1.12. Section 2(4)(p) of NEMA provides that "*the cost 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 by those responsible for harming the environment*."

65.1.13. As already indicated in paragraph 65.1.4 above, it is common cause that coal-fired power stations impact significantly upon the health of those living in close proximity to them, and that these health impacts inevitably give rise to additional cost burdens, borne by those affected, and ultimately, the state.

65.1.14. Furthermore, it is noted that the project site area has limited water availability which, the FEIR notes "*is likely to become limiting in the future*".[50] Not only are such impacts predicted to worsen as a result of the impacts of climate change, but this will also impact negatively upon the health and well-being of communities located in the area as their access to already scarce water resources becomes further restricted. Moreover, insofar as the FEIR records that water is likely to "become limiting in the future" in respect of, and for the future operation of, the project itself, the appellant points out that the project is not feasible if its access to water, on which its operation depends, cannot be guaranteed.

65.1.15. It is therefore inconsistent with the above - and other - principles to grant the authorisation without adequate provision being made for or consideration being given to, inter alia, the significant water shortage in the area and inevitable health impacts on those living in the area of the authorised activity and the resultant expenses that they will incur as a result of the anticipated impacts upon their health and well-being.

65.1.16. It is submitted that the first respondent has failed to apply the risk averse and cautious approach (the so-called 'precautionary principle') demanded by section 2 NEMA, in that it granted the authorisation without a comprehensive health assessment or

[50] Annexure D2: Comments and Responses Report, FEIR, May 2014.

climate impact assessment. This means that the authorisation was granted without,, inter alia, adequate information about the full implications of the project for health and for its contribution to climate change and adaptation to a changed climate.

65.1.17. The first respondent should, at the very least, have required:

65.1.17.1. detailed health impact studies to be conducted in respect of the impacts on communities living within close proximity to the project site with regard to air quality and water resources;

65.1.17.2. detailed climate impact studies to be conducted to assess the impacts of climate change for, in particular, water resources estimated to be available for this project, as well as the impacts of the project on greenhouse gas emissions and adaptation to a changed climate.

65.1.18. I&APs should have been granted an opportunity to make submissions in relation to such studies, and the first respondent should have considered these studies and the comments received before making any decision in relation to the authorisation. It is submitted that any envisaged economic benefits deriving from the project would far be outweighed by the social and economic harm likely to be caused by it – harm that is likely to accumulate and increase over time as the impacts of climate change become increasingly evident in water-scarce areas like Limpopo.

65.2. **Failing to give effect to the general objectives of integrated environmental management laid down in Chapter 5 of NEMA through failing to meet the requirements of NEMWA for a WML and consequently an integrated licence as required by NEMWA and NEMA**

65.2.1. It is noted that the authorisation is an integrated authorisation in terms of both the EIA regulations, 2010 and NEMWA and the NEMWA list of waste management activities.[51]

65.2.2. As already confirmed above, section 24L NEMA provides that an integrated environmental authorisation may only be issued if "*the relevant provisions of …* [NEMA] *and the other law or specific environmental management Act have been complied with*". This confirms that the authorisation must comply with the requirements of NEMWA.

65.2.3. Section 44(1) of NEMWA regulates co-operative governance in WML applications and provides for the issuing of an integrated licence in this regard.[52]

65.2.4. In terms of section 44(4) NEMWA, an integrated licence must:

"*(a) specify the statutory provisions in terms of which it has been issued;*

(b) identify the authority or authorities that have issued it;

(c) indicate to whom applications for any amendment or cancellation of the integrated licence must be made; and

(d) indicate the appeal procedure to be followed."

65.2.5. Section 51(1) NEMWA specifies and stipulates what a WML must contain.[53] The WML should specify:

"*(a) the waste management activity in respect of which it is issued;*

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[51] Government Notice 921 of 2013.

[52] Section 44(1) provides that "*for the purposes of issuing a licence for a waste management activity, the licensing authority must as far as practicable in the circumstances co-ordinate or consolidate the application and decision-making processes contemplated in this Chapter with the decision-making process in Chapter 5 of* [NEMA] *and other legislation administered by other organs of state, without whose authorisation or approval or consent the activity may not commence, or be undertaken or conducted*."

[53] Section 50 NEMWA deals with the issuing of WMLs subject to the condition requirements set out in section 51.

(b) premises or area of operation where the waste management activity may take place;

(c) the person to whom it is issued;

(d) the period from which the waste management activity may commence;

(e) the period for which the licence is issued and period within which any renewal of the licence must be applied for;

(f) the name of the licensing authority;

(g) the periods at which the licence may be reviewed, if applicable;

(h) the amount and type of waste that may be generated, handled, processed, stored, reduced, reused, recycled, recovered or disposed of;

(i) if applicable, the conditions in terms of which salvaging of waste may be undertaken;

(j) any other operating requirements relating to the management of the waste; and

(k) monitoring, auditing and reporting requirements."

65.2.6. Section 17.1 of the authorisation specifies permissible waste and the conditions regulating the ash dumps and pollution control dams are contained in section 17.2. Section 17.4 of the authorisation deals specifically with general operation and impact management of waste management activities.

65.2.7. The authorisation falls short of the requirements of section 24L of NEMA read with the above requirements of section 51 of NEMWA in that a number of the section 51 requirements are not met. The authorisation fails to stipulate:

65.2.7.1. the period from which the waste management activity may commence;

65.2.7.2. the period for which the licence is issued and the period within which any renewal of the licence must be applied for;

65.2.7.3. the periods at which the licence may be reviewed;

65.2.7.4. the amount and type of waste that may be generated, handled, processed, stored, reduced, reused, recycled,

recovered or disposed of, as the authorisation fails to quantify the waste;

65.2.7.5. the conditions in terms of which salvaging of waste may be undertaken. The authorisation should specify conditions which would apply should Newshelf intend to recycle its ash; and

65.2.7.6. the monitoring, auditing and reporting requirements are too vague to constitute adequate compliance with section 51(1)(k).

65.3. **Failing to give effect to the general objectives of integrated environmental management laid down in Chapter 5 of NEMA through failing to comply with s24O(1)(b)(vii) and s24O(1)(c) of NEMA**

65.3.1. Section 24(4) of NEMA provides, in relevant part:

"Procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment …

(a) must ensure, with respect to every application for an environmental authorisation:

(i) coordination and cooperation between organs of state in the consideration of assessments where an activity falls under the jurisdiction of more than one organ of state;

(ii) that the findings and recommendations flowing from an investigation, the general objectives of integrated environmental management laid down in this Act and the principles of environmental management set out in section 2 are taken into account in any decision made by an organ of state in relation to any proposed policy, program, process, plan or project…".

65.3.2. Section 24O(1)(b)(vii) of NEMA provides that when a decision-maker is considering an environmental authorisation application, he or she must take into account "*any comments received from organs of state that have jurisdiction over any aspect of the activity which is the subject of the application.*" Section 24O(1)(c) of NEMA also obliges a

decision-maker to take into account the comments of any organ of state charged with the administration of any law which relates to the activity in question.

65.3.3. It appears from the Comments and Reponses Report[54] that LEDET and the Waterberg District Municipality participated in meetings in 2012, where questions concerning, inter alia, job creation, rural and social development, provision of water and atmospheric emissions were raised. LEDET again attended a focus group meeting in April 2014.

65.3.4. It appears further that letters of submissions or acknowledgments of the process were received from the Director General of the Department of Rural Development and Land Reform (19 March 2014); the Limpopo Regional Department of Mineral Resources (4 December 2012); Limpopo Department of Roads and Transport (18 March 2014); and LEDET (7 April 2014) in relation to the project.[55]

65.3.5. There is no indication, from the Comments and Responses Report that LDWAS participated at any stage of the EIA process. Although it is noted that they were given notification of the availability of the draft EIA report for public comment.[56] This is a major concern for the appellant, given that the shortage of water is one of the many reasons why the authorisation should not have been granted.

65.3.6. It is not known to what extent the LDWAS or other relevant state departments, not mentioned above, have been involved in the decision-making process of the first respondent with regard to this authorisation. It is however noted that, given the anticipated impacts of the project on surrounding water resources, the first respondent should have consulted with LDWAS, and LDWAS should have participated in this decision-making process. Failure to do so amounts to a neglect of their constitutional and legislative obligations. It is submitted that, if the authorisation was granted without input from LDWAS, it will have been granted without having regard to relevant

[54] Annexure D2 to the FEIR, May 2014.
[55] Pages 27 – 28, Annexure D2: Comments and Responses Report, FEIR, May 2014.
[56] Annexure D3: Letters to Organs of State, FEIR, May 2014.

considerations. Furthermore since, as has been submitted above, the IWULA process is only now about to commence, it is unlikely that the LDWAS, and/or DWS, and consequently the first respondent, would have seen or been able to consider any recent and relevant water studies in respect of the project.

65.3.7. It has been recorded above, in paragraph 35, that SAHRA submitted interim comments, dated 12 May 2014 ("the SAHRA interim comments") on what appears to be, the archaeological impact assessment for the FEIR, in terms of section 38(3) of the National Heritage Resources Act, 1999 (NHRA), in which it was submitted, inter alia, that the site of the project includes engravings and stone walls and that the area was considered to be of high palaeontological sensitivity. A copy of the SAHRA interim comments are attached as annexure **12**; it concludes that "*Since the current specialist study is limited to an archaeological impact assessment and no palaeontological impact assessment was undertaken, SAHRA will only be able to issue a final comment on the project once the palaeontological impact assessment is received. Please note that the geology of the area is considered of high palaeontological sensitivity, as such a desktop study is required and based on the outcome of the desktop study, a field assessment is likely*"

65.3.8. Annexure D2 to the FEIR, the 'Comments and Responses Report' states that a palaeontological impact assessment will be undertaken and sent to SAHRA for final comment.[57]

65.3.9. It is not known what it meant by "*final comment*". However, in terms of section 38 NHRA, the applicant cannot proceed with the project without SAHRA approval.

65.3.10. The appellant contacted SAHRA to ascertain the status of the above and was advised that a palaeontological assessment had been conducted and that SAHRA had submitted final comments on 23 July 2014 ("the SAHRA final comments"), attached hereto as annexure **13**.

[57] Page 76, Annexure D2: Comments and Responses Report, FEIR, May 2014.

65.3.11. The SAHRA final comments made some of the following recommendations:

65.3.11.1. *"A buffer zone of a minimum of 30m must be established around Nelson's Kop. No impact on any of the archaeological resources is allowed. If this is not possible, the archaeologist will need to re-assess the situation and a mitigation in terms of s. 35(4) of the NHRA must be applied for; and*

65.3.11.2. *Regular monitoring by an ECO should be undertaken for the sediments of the Karoo Supergroup and Cenozoic regoliths. If any new evidence of fossil material is identified, work must halt immediately in the area and a palaeontologist must be contacted to inspect the findings. If the newly discovered findings are of palaeontological significance, the specialist will require to apply for a permit in terms of s. 35(4) of the NHRA*."

65.3.12. The FEIR makes no mention of a palaeontological assessment - the heritage impact assessment, dated March 2014, only contains an archaeological impact assessment, and the FEIR currently notes, in respect of palaeontology for the project site that "*there are no visible fossil bearing strata in the study area*"[58] - nor does the FEIR reflect that final comments were submitted by SAHRA on the FEIR.

65.3.13. Furthermore, the above requirements in the SAHRA final comments do not appear to be incorporated into the FEIR or the conditions of the authorisation.

65.3.14. Therefore it is submitted that authorisation was granted without the first respondent having regard to SAHRA's final comments or the palaeontological assessment, as it was required by NEMA to do. In the event that the first respondent was provided with and did

[58] Page 93 FEIR.

consider the palaeontological assessment and the SAHRA final comments, reference should have been made to these in the authorisation and SAHRA's recommendations should have been included as conditions to the authorisation.

65.3.15. It is submitted that the FEIR should have been amended to reflect the SAHRA final comments recommendations and to address the details of the palaeontological assessment. As it stands, the FEIR is incomplete and inaccurate. In addition, the palaeontological assessment and the amended FEIR should have been made available for comment by I&APs.

65.4. **Failing to take into account feasible alternatives as outlined in section 24O(1)(b)(iv) NEMA**

65.4.1. Section 24O(1)(b)(iv) provides that a decision-maker must take into account "*where appropriate, any feasible and reasonable alternatives to the activity which is the subject of the application and any feasible and reasonable modifications or changes to the activity that may minimise harm to the environment*".

65.4.2. It is submitted that a suitable alternative in the circumstances would be to abandon implementation of the project entirely, otherwise known as the "no-go option" and referred to in the FEIR as a "do-nothing alternative". The FEIR states that the need for the project on a national scale has been determined in terms of the IRP, and "*the do-nothing option will therefore not address this national need and may result in the electricity demands in the country not being met in the short term*".[59]

65.4.3. The FEIR, however, fails to indicate why renewable energy sources could not have been used as a suitable alternative, and it only considers coal as a source of power generation.

65.4.4. The FEIR states that "*as more than 50% of the remaining coal reserves in the country are located in the Waterberg area, and optimal*

[59] Page 188, FEIR, May 2014.

grid connection opportunities are available, not developing the project on the proposed site would see such an opportunity being lost".[60] In light of the negative impacts associated with coal-fired power stations and the dire shortage of water in the area - likely to worsen as a result of climate change within the timescale of this project - as highlighted above and in more detail below, it is submitted that this is an unacceptable justification to rule out feasible alternatives; especially when the FEIR does not make any proper attempt to consider and evaluate these as is required by NEMA.

65.4.5. It is submitted that the proposed site of the project could have potential as a site for solar power generation, or other renewable energy sources.

65.4.6. Without the necessary technical data and research information, the appellant is not in a position to make submissions on the suitability and generation capacity of the project site of for specific renewable energy generation through, for instance, coal or wind. However, it is submitted that the first respondent should have considered this possibility and required that feasibility studies for renewable energy sources - as an alternative to coal - be conducted as part of the EIA.

65.4.7. Given the scarcity of water resources in the area and the substantial water requirements of the project; the cumulative and other environmental impacts of the project, the related detrimental health impacts and the potential for renewable power generation on the site, it is submitted that it would be appropriate to consider both the 'no-go option', and the possibility of renewable energy as a feasible alternative to the project in the circumstances.

65.4.8. It must also be noted that GDF Suez, a shareholder in Newshelf, portrays and markets itself as having "*unique expertise in … renewable energy and energy efficiency*"[61] In the circumstances, it can be assumed that GDF Suez, and consequently Newshelf, have the necessary technological knowledge and experience at their disposal to substitute the proposed coal-fired power station for more

[60] Page 188, FEIR, May 2014.
[61] http://www.gdfsuez.com/en/group.

appropriate renewable alternatives. Furthermore, they cannot feign ignorance of the dire need to shift the energy sector towards cleaner carbon-emission-free alternative energy sources. GDF Suez confirms, on its website, that it "*puts responsible growth at the heart of all its businesses in order to rise successfully to today's major energy and environmental challenges*".[62]

65.4.9. In light of the above, it is submitted that the first respondent has failed to comply with section 24O(1)(b)(iv) of NEMA. By doing so, it has also failed to take relevant considerations into account.

65.5. **Failure to consider applicable policies relevant to the application, as required by section 24O(1)(b)(viii) NEMA**

65.5.1. Section 24O(1)(b)(viii) NEMA provides that a decision maker must consider "*any guidelines, departmental policies, and environmental management instruments that have been adopted in the prescribed manner by the Minister or MEC, with the concurrence of the Minister, and any other information in the possession of the competent authority that are relevant to the application*".

65.5.2. It is submitted that the first respondent, in granting the authorisation, evidently failed to take into account the National Climate Change Response White Paper (the "White Paper")[63] which "*presents the South African government's vision for an effective climate change response and the long-term, just transition to a climate-resilient and lower carbon economy and society.*"[64]

65.5.3. It acknowledges, inter alia, that: *"although there will be costs associated with South Africa's adaptation and GHG* [greenhouse gas] *emission reduction efforts, there will also be significant short and long-term social and economic benefits … Furthermore various economic studies have shown that the costs of early action will be far less than the costs of delay and inaction".* In its objectives, it records that it will

[62] http://www.gdfsuez.com/en/group.
[63] Available at http://www.sanbi.org/sites/default/files/documents/documents/national-climate-change-response-white-paper.pdf
[64] Page 5, Executive Summary, National Climate Change Response White Paper.

"*effectively manage inevitable climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity [and] make a fair contribution to the global effort to stabilise GHG concentrations in the atmosphere*."[65]

65.5.4. This White Paper confirms, among other things, that "*South Africa is a water scarce country with a highly variable climate and has one of the lowest run-offs in the world – a situation that is likely to be significantly exacerbated by the effects of climate change*."[66]

65.5.5. The White Paper indicates clearly the intention of the government to take positive steps to address issues of air quality and climate change in South Africa. In granting the authorisation, and given the significant greenhouse gas emissions of coal-fired power stations, the first respondent, has directly contradicted these intentions and consequently contravened section 24O(1)(b)(viii) NEMA.

<u>Second Ground of Appeal: The First Respondent, Failed to Take into Account the Air Quality Impacts of the Project and, in doing so, Granted an Authorisation which Contravenes South Africa's Air Quality Legislation</u>

66. It is submitted, as has been mentioned above, that the FEIR and the first respondent's decision to grant the authorisation fails to consider:

66.1. the significant contribution that the project will make to the already poor air quality within the WBPA;

66.2. the severely detrimental, and often fatal, health impacts of coal-fired power station emissions on people residing in close proximity to them; and

66.3. the objectives and provisions of South Africa's national air quality legislation.

[65] Page 11, National Climate Change Response Objective, National Climate Change Response White Paper.
[66] Page 17, Section 5.2: Water, National Climate Change Response White Paper.

67. In the context of giving effect to the environmental right in section 24 of the Constitution of the Republic of South Africa, 1996, AQA was promulgated as the framework legislation to ensure that levels of air pollution are not harmful to human health or well-being. The AQA commenced on 11 September 2005 and aims to: protect and enhance of the quality of air in the Republic; prevent air pollution and ecological degradation; secure ecologically sustainable development while promoting justifiable economic and social development; and generally give effect to section 24(a) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.[67]

68. The 2012 National Framework for Air Quality Management in the Republic of South Africa[68] ("the 2012 National Framework") - an amendment of the 2007 National Framework for Air Quality Management - records that the environmental impact assessment process is a participatory process, which provides government with the detailed information required for it to make an informed decision on whether a development may go ahead or not and, in the case of a go-ahead, exactly what measures must be taken to ensure that safety, health and environmental impacts are kept to acceptable levels.[69]

69. The 2012 National Framework is binding on all organs of state in all spheres of government by virtue of section 7(3)(a) AQA and it recognises that "*activities that result in atmospheric emissions are to be determined with the objective of achieving health-based ambient air quality standards. Each new development proposal with potential impacts on air quality must be assessed not only in terms of its individual contribution, but in terms of its additive contribution to baseline ambient air quality i.e. cumulative effects must be considered*."[70]

70. National Ambient Air Quality Standards (NAAQS) were published in terms of section 9 AQA, on 24 December 2009 for various substances, including for PM_{10} (particles with aerodynamic diameter less than 10 micro metres, and on

[67] Section 2 AQA.
[68] Government Notice 919, of Government Gazette no 37078 of 29 November 2013.
[69] Paragraph 4.2.6, page 35, 2012 National Framework for Air Quality Management in South Africa.
[70] Paragraph 5.5.3.2, page 79, 2012 National Framework for Air Quality Management in South Africa.

29 June 2012, for $PM_{2.5}$ (particles with aerodynamic diameter less than 2.5 micro metres). The NAAQS establish national standards for ambient air quality, including the permissible amount or concentration of each such substance or mixture of substances in ambient air. The NAAQS are health-based standards, intended to provide safe daily exposure levels for the majority of the population - including the very young and elderly.

71. It is submitted that the air quality impacts of the project were not considered in accordance with the 2012 National Framework or with NAAQS.

72. As stated above, the towns of Marapong, Onverwacht and Lephalale are all located within less than 25kms from the project site.

73. It has already been noted above that coal-fired power stations contribute the poor health and high mortality rates of people living in close proximity to them. Even in 2006, reports which Eskom commissioned itself,[71] prepared at a time when it operated only 10 coal-fired power stations, the deadly impacts of power station emissions were considered. In relation to Mpumalanga, the report[72] found, inter alia, that:

    73.1. future baseline Eskom power station emissions are associated with significant non-compliance with relevant ambient sulphur dioxide limits even in the absence of contributions by “other sources”. The magnitude, frequency and spatial extent of such non-compliance are predicted to increase significantly when compared to current baseline emissions;

    73.2. Current Eskom power stations were cumulatively calculated to be responsible for 17 non-accidental mortalities per year and 661 respiratory hospital admissions, representing 3.0% and 0.6% of the total non-accidental mortalities and respiratory hospital admissions projected across all sources;

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[71] The Eskom heath studies and reports can be accessed at: http://cer.org.za/virtual-library/letters/eskoms-health-studies.

[72] Eskom Mpumalanga Highveld Cumulative Scenario Planning Study: Air Pollution Compliance Assessment and Health Risk Analysis of Cumulative Operations of Current, RTS and Proposed Eskom Power Station Located within the Mpumalanga and Gauteng Provinces, October 2006.

73.3. Future Eskom power stations (without S02 abatement in place) and other sources quantified during the study, were predicted to result in 1209 deaths per year and about 155 623 respiratory hospital admissions per year;

73.4. Eskom power stations are predicted to become the most significant source group in terms of contributions to estimated total non-accidental mortality due to inhalation exposures (51% of predicted). The large increase in the contribution of Eskom power stations to the total estimated risk is due to (i) the larger mortality risk assigned to SO2 relative to PM10 and nitrogen dioxide (NO2) and (ii) the marked increase in the frequency of the exceedance of the threshold above which health risks are calculated (ie 25µg/m3);

73.5. Health risks do not increase in the same order as increases in emissions, but rather tend to increase more sharply with such changes. Even marginal increases in emissions could significantly increase health risks by resulting in more people being exposed to concentrations in excess of the threshold. It is for these reasons that, whereas future Eskom power station emissions will increase by a factor of 2.2 (i.e. 54% from 1434 ktpa to 3126 ktpa), mortalities and hospital admissions due to Eskom power station emissions are projected to increase by factors of 36 and 27, respectively.[73]

74. It is submitted that even in relation to Limpopo,[74] at a time when Matimba was the only coal-fired power station in the area and using 2001 census data, Eskom's own report (which was redacted by Eskom prior to its release in response to a Promotion of Access to Information Act, 2000 request) stated: [75]

[73] Xiv-xvii.
[74] Air Pollution Health Risk Analysis of Operations of Current and Proposed Eskom Power Stations Located in the Limpopo Province.
[75] Iii.

Exposures to SO_2 were estimated to be responsible for 82% of the total non-accidental mortality and 38% of the respiratory hospital admissions estimated due to current, quantified sources. PM10 was predicted to be responsible for 17% of the total non-accidental mortality and 57% of the respiratory hospital admissions. Nitrogen dioxide was found to be the least significant of the three pollutants considered in terms of total morbidity and mortality, accounting for only ~1% of the total non-accidental mortality estimated and 5% of the respiratory hospital admissions.

Project Alpha and would result in health risks being doubled from 1.5 to 3 premature deaths and from 144 to 300 respiratory hospital admissions per year. The implementation of SO_2 controls with a 90% control efficiency for Project Alpha is predicted to result in an avoidance of ~1 mortality and ~50 respiratory hospital admissions per year, with the remaining increment being primarily due to the

Inhalation-related health risks due to Matimba Power Station operations and other sources are predicted to be relatively low due primarily to the limited exposure potential. Only about 22 000 people were estimated to live within ~25 km of the power station based on the 2001 Census data, with the majority of these people residing upwind of the power station. Given such exposure, health risks due to SO_2, PM10 and NO_2 concentrations from Matimba Power Station, , household fuel burning and brickmaking emissions are estimated to result be in the order of ~1.5 premature mortalities and ~140 respiratory hospital admissions per year. The highest health risks due to all sources are predicted to coincide with the areas of denser residential settlement (Marapong, Onverwacht) as is to be expected.

Emissions from existing Matimba Power Station operations are estimated to be responsible for ~80% of the premature mortality and ~50% of the respiratory hospital admissions predicted to occur.

75. In relation to Medupi power station, the World Bank's Inspection Panel, following an investigation, produced an Investigation Report in November 2011.[76] This report found significant and serious health impacts associated with Medupi's operation.

76. As stated above, the location of the project falls within the WBPA, declared as such in terms of section 18(1) AQA.[77] It is set out above that the WBPA AQMP is still in draft format. However, the threat assessment referred to above, which informs the draft AQMP, reports clearly that development in the region will increase ambient concentrations of pollutants on a regional scale, and the areas of greatest concern are where the national ambient air quality standards for

[76] South Africa: Eskom Investment Support Project (IBRD Loan No. 78620-ZA), 21 November 2011, Report No. 64977-ZA. Available at http://siteresources.worldbank.org/EXTINSPECTIONPANEL/Resources/Eskom_IPN_Investigation_Report_11.21.11.pdf.

[77] Government Notice 495, Government Gazette no 35435 of 15 June 2012.

SO2 and PM10 are predicted to be exceeded, concentrated in the Lephalale area and extending towards Botswana.[78]

77. In addition to all of the identified factors that will lead to poorer air quality, the threat assessment notes that the current resources in all tiers of government responsible for AQM in the WBPA are not adequate to cope effectively with the imminent changes. The decision to grant the authorisation goes against the clear air quality management intentions for the WBPA.[79]

78. The fact that the Waterberg-Bojanala area has been declared a priority area indicates that the NAAQS are being or may be exceeded in the area.[80]

79. The FEIR envisages a high risk for cumulative air quality impacts, yet fails to adequately assess air quality impacts.

80. Despite the allegation by Savannah that the air quality impacts were considered in the EIA process, the appellant disputes that there was anything near to an appropriate assessment of air quality considerations in this regard. The FEIR, instead of addressing the air quality impacts of the project, suggests that the air quality issues will be addressed by the WBPA AQMP. This is not what is prescribed by NEMA and the EIA process, which requires that all potential environmental impacts be considered, investigated, assessed and reported on.[81]

81. This is exacerbated by the fact that I&APs, like the appellant, were not advised that the AEL application had been advertised for comment and were therefore not able to make submissions on the application. It is reiterated that, in any event, the 14 day comment period that was apparently provided in this regard falls far short of the legislated obligation for a “reasonable period” to be provided for comment. This, it is submitted, is also a violation of PAJA.

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[78] Page vi, Annexure A2, Waterberg Bojanala Priority Area AQMP Threat assessment, 24-04-2015.
[79] Page vi, Annexure A2, Waterberg Bojanala Priority Area AQMP Threat assessment, 24-04-2015.
[80] Section 18(1) AQA.
[81] Section 24(1) NEMA.

82. If the constitutional environmental rights, AQA, NEMA, NAAQS, the WBPA declaration, the 2012 National Framework, as well as the health assessments and reports referred to above, had been taken into consideration as required, it is submitted that the first respondent would not have granted the authorisation.

Third Ground of Appeal: the First Respondent Failed to take into Account the Cumulative Impacts of the Project

83. The NEMA EIA Regulations, 2010 define cumulative impacts as "*in relation to an activity … the impact of an activity that in itself may not be significant, but may become significant when added to the existing and potential impacts eventuating from similar or diverse activities or undertakings in the area*".[82]

84. Regulation 31(2)(l)(i) of the EIA regulations, 2010 requires an EIA to contain an assessment of each identified potentially significant impact including, inter alia, cumulative impacts.

85. In terms of regulation 34(2),[83] the competent authority is obliged to reject the FEIR if it does not substantially comply with regulation 31(2).

86. It is submitted that the FEIR, in relation to cumulative impacts, provides the following:

    86.1. With regard to biodiversity cumulative impacts, "*the cumulative impacts of habitat destruction and the associated loss of species are regarded as severe on a local and regional scale*"[84] the FEIR then goes on to state that "*the danger in this type of cumulative impact is that effects are not known or visible with immediate effect and normally when these effects become visible they are usually beyond repair*",[85] yet the FEIR classifies the cumulative impacts as being of 'medium significance'.

    86.2. With regard to the cumulative impact of the project on the water supply, the FEIR fails to assess cumulative impacts at all. It simply refers to

[82] Regulation 1(1) NEMA EIA Regulations, 2010.
[83] NEMA EIA regulations, 2010.
[84] Page 191 FEIR, May 2014.
[85] Page 191 FEIR, May 2014.

water supply being obtained from MCWAP,[86] but does not assess the possibility that the water supply from MCWAP may still be insufficient, that MCWAP 2 may not obtain the necessary approval to proceed to the second phase, or the very likely possibility that the cumulative impacts on the water source in the area in the long-term will be severe, and will result in dire consequences for the communities and existing projects in the area. The FEIR states that "*Due to the development of the MCWAP by DWA, water is not currently a limiting factor in the area, although this is likely to become limiting in the future*".[87] A decision regarding a project that has such a high demand for water in a water scarce region cannot disregard or even downplay the cumulative, long-term future impacts.

86.3. The project will allegedly not affect groundwater as no abstraction from groundwater is proposed.[88] However, this fails to take into account potential cumulative impacts caused by seepage from the ash dump or coal stockpiles, stating that "*these potential impacts could not be quantified (due to no data being available from other developments in the area, these impacts are potentially significant as the groundwater in the area is utilised by landowners for stock watering and potable supply*".[89] The FEIR also fails to address any potential groundwater impacts resulting from the boreholes on the site. This potential cumulative impact is highlighted by the condition in the authorisation that states that the ash dump and coal stockpiles must be relocated away from the fault zones. It can be deduced that these zones are preferential flow paths for groundwater and represent a high risk of impact on groundwater users in the area.

86.4. The FEIR recognises that, due to the numerous power stations in the area, there will be compounding of effects and hence cumulative impacts during operation of the power station. It acknowledges that there is a risk to health and a high risk of direct and cumulative air quality impacts from dust, $PM_{10,}$ SO2 and NOx emitted during normal operation of the power

[86] Page 191, FEIR, May 2014.
[87] Page 117, Annexure D2: Comments and Responses Report, FEIR, May 2014.
[88] Page 192, FEIR, May 2014.
[89] Page 192, FEIR, May 2014.

station.[90] The FEIR states that it is likely that the AQMP for the WBPA will include emission reduction requirements. In addition, it is noted that the modelling for the assessment only assessed the cumulative impacts of certain sources of air pollutants at the project such as the stacks, coal storage and ash dumps, but failed to assess cumulative impacts of other current and future sources of air pollutants. The FEIR states that this will be assessed quantitatively in the development of the AQMP.[91] Legally, the assessment obligations under the NEMA process cannot be deferred to the AQMP development process. Moreover, reliance cannot be placed on the AQMP for the WBPA to address the air quality issues which will arise from the project. This amounts to a failure to comply with NEMA's section 24 provisions, as the potential consequences for or impacts on the environment of listed activities or specified activities were not adequately considered, investigated, assessed and reported on to the competent authority. In these circumstances, authorisation should not have been granted. It is, however fundamental that the granting of any authorisations will not contradict the intentions for air quality management in the WBPA and as indicated in the draft AQMP.[92]

86.5. With regard to cumulative impacts on heritage sites, the FEIR notes that the site is of medium to high archaeological significance, but fails to take into account the palaeontological significance of the region as identified in SAHRA's interim comments referred to above and the requirements contained in SAHRA's final comments.

86.6. The cumulative visual impacts of the project have potential to be significant, from the perspective of sky-glow and lighting, which could impact game and hunting farms utilised by tourists.[93]

86.7. With regard to the potential cumulative socio-economic impacts, the FEIR states that these are both positive and negative, citing job opportunities, skills development, economic upliftment, reduction of poverty and improved living conditions as some of the positive impacts in the area. The noted negative impacts are the potential pressure that

[90] Page 193, FEIR, May 2014.
[91] Page 53, Annexure D2: Comments and Responses Report, FEIR, May 2014.
[92] Page 194, FEIR, May 2014.
[93] Page 194, FEIR, May 2014.

could be placed on local industry, the pressure on local services and housing due to immigration to the area and the impact on land available for agriculture and game farming.[94] These are purely economic effects and the FEIR completely disregards the cumulative socio-economic impacts from a health and well-being perspective. In any event, the appellant's experience with other coal-fired power stations is that the majority of the alleged positive impacts will not materialise. Either way, it is submitted that the negative impacts – for human health and the environment – will far outweigh any positive impacts.

87. In light of the above, it is submitted that the FEIR fails to adequately assess cumulative impacts of the project and therefore does not comply with regulation 31(2). Accordingly, the first respondent was under an obligation to refuse the application.

88. In instances where the risks of cumulative impacts are recognised as being high, such as in the case of the air quality and water impacts, it is submitted that the first respondentfailed to attach sufficient weight to the severity of the impacts and should have refused the authorisation on this basis alone, or, at the very least (also in application of the precautionary principle), should have required that further, more detailed, investigation into the impacts be conducted.

<u>Fourth Ground of Appeal: The First Respondent Failed to take into Account the International and National Obligations to Mitigate and take Positive Steps against Climate Change</u>

89. It is proven that climate change impacts upon, and will continue to impact on, inter alia:

[94] Page 195, FEIR, May 2014.

89.1. water resources due to changes in rainfall and evaporation rates, which will consequently impact upon agriculture, forestry and industry due to an increased irrigation and water supply demand;[95]

89.2. air quality, through the impacts upon weather patterns which will negatively influence criteria pollutants such as PM, SO2, NO2, ozone, carbon, monoxide, benzene, lead;[96]

89.3. human health, through bringing about an increase in, for instance, vector-borne diseases, heat stress, increased natural disasters;[97]

89.4. biodiversity due to, for instance, loss of habitat resulting from increased temperatures and desertification;[98] and

89.5. marine fisheries, due to changes in water flows and ocean temperatures.[99]

90. South Africa is a signatory to the United Nations Framework Convention on Climate Change and the Kyoto Protocol, international agreements which seek to address climate change and set internationally binding emission reduction targets.

91. Although South Africa does not, at this stage, have any set emission reduction obligations under the Kyoto Protocol, it has undertaken to make commitments for national contributions towards greenhouse gas (GHG) emission reductions for period 2020-2030, has expressed an intention to participate in a legally binding universal agreement on climate change to be entered into at COP21 in Paris in December 2015, and it acknowledges that "*the science is clear that action to address the causes and impacts of climate change by a single country or small group of countries will not be successful. This is a global problem requiring a global solution through the concerted and cooperative efforts of all countries*".[100] It is incumbent on the state to ensure that its actions, laws and

[95] Pages 6 – 9, Long Term Adaptation Scenarios: Summary for Policy Makers available at http://www.sanbi.org/sites/default/files/documents/documents/ltassummary-policy-makers2013high-res.pdf.
[96] Page 11, Long Term Adaptation Scenarios: Summary for Policy Makers.
[97] Page 11, Long Term Adaptation Scenarios: Summary for Policy Makers.
[98] Page 15, Long Term Adaptation Scenarios: Summary for Policy Makers.
[99] Page 13, Long Term Adaptation Scenarios: Summary for Policy Makers.
[100] Pages 8 and 9, Introduction, National Climate Change Response White Paper.

decision-making coincide with its evident intentions to address climate change and take into account the high probability of internationally binding climate change obligations in the near future.

92. South Africa is already one of the world's largest contributors to global climate change, having produced around 547Mt of carbon dioxide equivalent (CO2-eq) in 2010 (around 231.9 Mt is produced by the electricity sector alone). The South African government has recognised the need for climate action and has set 398Mt CO2-eq per year as the target limit for CO2 by 2025. However, the Medupi and Kusile power stations will likely add a further 70Mt of CO2-eq a year. The project, which is the subject of this appeal, is merely one of further coal-fired power plants envisaged to be commissioned in future, and it alone will produce between 9,7 and 19,4 Mt of CO2 per year.[101]

93. National legislation recognises the need to curb GHG emissions and address climate change in that AQA requires that an AEL must specify GHG emission measurements and reporting requirements,[102] and the 2012 Framework for Air Quality Management acknowledges that "*in view of this, specialist air quality impact assessments must consider greenhouse gas emissions as well*."[103] Furthermore, the first respondent has indicated its intention that GHGs will be declared priority pollutants under AQA in terms of Government Notice 172 of 2014.

94. The South African Government has acknowledged the risks of climate change by adopting the White Paper which is addressed in paragraph 65.5 above. It confirms that "*the policy outlined in this White Paper embodies South Africa's commitment to a fair contribution to stabilising global GHG concentrations in the atmosphere and to protecting the country and its people from the impacts of inevitable climate change.*"[104] The White Paper includes a National Climate Change Response Strategy ("the climate change response strategy"), which

[101] http://earthlife.org.za/2015/04/%EF%BB%BFpress-release-gdf-suez-set-to-increase-climate-change-in-south-africa-earthlife-to-protest.
[102] Section 43(1)(l) AQA.
[103] Paragraph 5.5.3.7, page 80, 2012 National Framework for Air Quality Management.
[104] Page 10, Introduction, National Climate Change Response White Paper.

has listed, as one of its strategic priorities, the need to "*prioritise the mainstreaming of climate change considerations and responses into all relevant sector, national, provincial and local planning regimes such as, but not limited to, the Industrial Policy Action Plan, Integrated Resource Plan for Electricity Generation, Provincial Growth and Development Plans, and Integrated Development Plans.*"[105] This White Paper, as a national policy document, speaks to and should direct decision-making in respect of authorisations for any developments.

95. It can be concluded that, as part of the integrated environmental authorisation process envisaged by chapter 5 NEMA and requirement in section 24O(1)(b)(viii) of NEMA to consider relevant policy and other relevant information in deciding whether or not to grant an authorisation, the GHG emissions and climate change impacts of the project should have been taken into account in deciding whether or not to grant the authorisation. They were not considered – either adequately or at all.

96. Furthermore, it is noted that the EIA Chief Directorate within DEA was instructed by the DEA to develop a process for the inclusion of assessments of climate change impacts into EIA authorisations before the end of the financial year 2013/2014. The outcome of this process is to date unknown, other than that such assessment is not yet included as a requirement within EIA processes. Nevertheless, it is submitted that the EIA process should include climate change considerations in full as part of the assessment process, otherwise referred to as 'climate change screening'. Such screening must include both mitigation - potential contribution to further GHG emissions - as well as adaptation measures. In other words, every development decision must be based on its contribution to both mitigation and adaptation. In this regard, it is submitted that the assessment and proposals of all developments should provide for, inter alia:

96.1. maximising reduction in direct and indirect GHG emissions;

[105] Page 15, National Climate Change Response Strategy, National Climate Change Response White Paper.

96.2. maximising potential for further mitigation, including 'sequestration offsets', ideally seeking a negative GHG balance;

96.3. optimising adaptation to impacts over the full life of the development, using best available knowledge and modelling projections of future impacts, which will become more extreme over time;

96.4. ensuring that such adaptations are not misdirected 'maladaptations' which will fail and/or exacerbate impacts/increase vulnerability over time; and

96.5. contributing to restoration of ecological infrastructures to better enable ecosystem-based adaptation, namely building improved resilience in people, infrastructure and ecosystems.

97. The above all serve to indicate a clear intention on the part of government to address climate change, and record a national stance to take steps to reduce GHG emissions. Therefore all decisions, including the current authorisation, should give effect to and be aligned with the above.

98. It is submitted that water availability, amongst other things, is a severe climate change concern for South Africa. The White Paper confirms that "*based on current projections South Africa will exceed the limits of economically viable land-based water resources by 2050. The adequate supply of water for many areas can be sustained only if immediate actions are taken to stave off imminent shortages*."[106]

99. The Long Term Adaptation Scenarios (LTAS)[107] aims to respond to the White Paper by developing national and sub-national adaptation scenarios for South Africa under plausible future climate conditions and development pathways. The LTAS reports acknowledge that impacts on South Africa are likely to be felt primarily via effects on water resources.[108] The LTAS report on implications for

[106] Page 17, section 5.2: Water, National Climate Change Response White Paper.
[107] See https://www.environment.gov.za/sites/default/files/docs/ltasphase2report7_longterm_adaptationscenarios.pdf and https://www.environment.gov.za/sites/default/files/docs/implications_waterbookV4.pdf.
[108] Page 6, Long Term Adaptation Strategies: Summary for Policy-Makers. Available at http://www.sanbi.org/sites/default/files/documents/documents/ltassummary-policy-makers2013high-res.pdf

the water sector states that "*At present, specific provisions for climate change adaptation have been made in very few of the water resources planning tools. There are some early attempts that have simulated simple scenarios of changed surface water supply in reconciliation studies*"[109]

100. As already stated above, the MCWAP is a project initiated by the LDWAS to supply industry and residents in the Waterberg district with water. Future water quantities were ascertained by the Reconciliation Strategy for the Crocodile West River System, which did not incorporate climate change considerations as a variable when reconciling available water resources with the needs of water users.

101. The LTAS records that "*development aspirations in South Africa will likely be influenced by opportunities and constraints that arise from climate change impacts on the water sector. Key decisions would benefit from considering the implications of a range of possible climate-water futures facing South Africa*."[110]

102. The region of the Crocodile West and the Mokolo catchment, which is in the north of South Africa, is deemed to be at high risk from climate change by the LTAS, particularly in terms of reduced runoff.[111] The LTAS acknowledges that "*under a drier future scenario, significant trade-offs are likely to occur between developmental aspirations, particularly in terms of the allocation between agricultural and urban industrial water use, linked to the marginal costs of enhancing water supply. These constraints are most likely to be experienced in central, northern and south-western parts of South Africa, with significant social, economic and ecological consequences through restricting the range of viable national development pathways*." [112]

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[109] Page 6, Long Term Adaptation Strategies: Summary for Policy-Makers. Available at http://www.sanbi.org/sites/default/files/documents/documents/ltassummary-policy-makers2013high-res.pdf

[110] Page 6, Long Term Adaptation Scenarios: Summary for Policy Makers. Available at http://www.sanbi.org/sites/default/files/documents/documents/ltassummary-policy-makers2013high-res.pdf

[111] Page 31, Climate Change Implications for the Water Sector in South Africa, LTAS Phase 1, Technical Report 2 of 6, October 2013. Available at https://www.environment.gov.za/sites/default/files/docs/implications_waterbookV4.pdf.

[112] Page 6, Long Terms Adaptation Scenarios: Summary for Policy Makers, October 2013.

103. The FEIR and IWULA pre-feasibility meeting referred to above indicate that the project intends to obtain its water from the allocation allotted to Thabametsi Mine, owned by Exxaro. The Thabametsi Mine obtains its water from the Mogol Dam, which forms part of the MCWAP. It is recorded in the draft minutes of the IWULA pre-feasibility meeting (annexure 2 hereto) that the intended way forward regarding the IWULA process is for Exxaro to assign a part of their MCWAP 1 licence to this project, "*this solution ensures that the Thabametsi Project has the water required without having to pace any strain on an already water scarce environment … It requires the Thabametsi Project to obtain a licence and Exxaro to amend their existing MCWAP-1 licence, something which is possible within the timeframes required*".[113]

104. Reports have shown, and indeed the FEIR acknowledges, that access to water in the area is anticipated to be a problem in the future. The FEIR fails to indicate how this problem will be addressed, particularly in the event that the allocated water for this project and Thabametsi mine is insufficient to support both projects. In addition, there is the further risk that MCWAP 2 is not approved and/or cannot be implemented. In the circumstances, it is premature for the authorisation to have been granted.

105. The failure to consider climate change implications shows a lack of policy coherence with the national climate change response policy and a disregard for the provisions of AQA and NEMA which require consideration of international obligations and GHG emissions as set out above. Furthermore, this shows a failure to consider the anticipated and fast-approaching impacts of climate change, in this particular instance, diminishing of water resources, which will, no doubt, have a significant impact on this project, as well as other projects and people living within the area and the surrounding environment.

[113] Page 3, Annexure 3 (IPP Thabametsi Power Plant Meeting Presentation), Draft Minutes of the IWULA Pre-feasibility Meeting.

Fifth Ground of Appeal: The Conditions of the Authorisation are Vague and Unenforceable

106. The conditions of the authorisation are couched in section17 of the EA. It is submitted that these are either vague and/or unenforceable in that:

106.1. The general conditions pertaining to the environmental authorisation are considered vague and lacking in detail. Furthermore they make reference to conditions in the environmental management programme (EMPr). The first respondent acknowledges that these conditions may change with time, "*should there be changes in the operation and management of the authorised activities*".[114] Since the authorisation provides that the EMPr is an extension of its conditions and non-compliance with the EMPr constitutes non-compliance with the authorisation, it is submitted that any amendments to the EMPr must comply with the relevant provisions of NEMA and the EIA Regulations;

106.2. Condition 17.2.2 of the authorisation requires that the DEA approve the design drawings for the ash dump. This leaves uncertainty In respect of the authorisation, and it is arguable that the authorisation has been granted without a prior opportunity to consider the ash dump design, a vital aspect of the project, particularly with regard to the positioning of the ash dump;

106.3. Condition 17.2.7 states that "*runoff water referred to in condition 17.2.5 which does not comply with the quality requirement applicable in terms of condition 17.2.6 and all sporadic leachate from this site must, be constructed and maintained on a continuous basic by the holder of the environmental authorisation and be lines as approved by the Department, to prevent pollution to groundwater – (a) be treated to comply with the aforementioned standard and discharged in a legal manner; and/or (b) with the written approval from the Department be evaporated in lined dams as approved by the Department; and/or (c) be discharged into any convenient sewer if acceptable by the authority in control of that sewer.*" The wording of this condition does not make

[114] Section 5 of the Authorisation.

sense and appears to be incomplete, the result being that it is unenforceable.

106.4. Condition 17.2.11 provides that "*any solid materials associated with the power station such as ash dumps and stockpiles need to be located away from the faults*." This condition requires more detail and further specific requirements, as numerous fault zones traverse the site. Significantly, this condition does not coincide with the plan diagram, attached as annexure **14**, taken from Appendix Q of the FEIR, as it would appear that the ash dam does cross at least two of the faults. The attached plan does not indicate the faults in the key but from the geohydrological report, the dashed lines on this plan appear to correlate with the fault lines. Based on this condition, a new layout plan should be prepared and evidence provided that this condition will be complied with. This required amendment to the proposed project is considered substantive, for several reasons, including; visual impact, operation design, access and infrastructure and other biological factors pertaining to the project, which are not listed.

106.5. Condition 17.5 stipulates a requirement to install water quality monitoring boreholes upstream and downstream of the project and with reference to the Daarby Fault. This condition is too vague, in that it fails to specify when this is required to be done, the positioning of the wells and other details such as depth. Furthermore, once again, this condition does not coincide with the plan diagram referred to above, and attached as annexure 14 as it could have an impact on the layout of the facility;

106.6. Condition 17.5.4 states that "*water abstracted from boreholes that are drilled in the fault zone downstream of the ash dump and stockpiles should be ceased*." This requires further clarity. With reference to the geohydrological report, the two main boreholes that should cease pumping are LEP 13 and 14. However, the report states that these boreholes are not in use, but belong to a private owner. The assumption is then that the owner must be instructed to cease water abstraction. However, it is not clear who will be responsible for

ensuring that steps are taken in this regard; within what time period such steps must be taken; and how this will be enforced.

106.7. Condition 17.6.1 stipulates that monitoring must be conducted for variables listed in Annexures I and II; however the annexures as they appear in the authorisation are not relevant to this condition, in that they refer to annual waste volume reports and not to water parameter analyses.

Sixth Ground of Appeal: The First Respondent's Granting of the Authorisation is in Contravention of PAJA

107. Section 33 of the Constitution recognises that everyone has the right to administrative action that is lawful, reasonable and procedurally fair. PAJA seeks to give effect to this right.

108. Section 6(2) PAJA provides that a court or tribunal has the power to judicially review administrative action if, inter alia:

108.1. **The action was taken because irrelevant considerations were taken into account or relevant considerations were not considered**[115]

108.1.1. As already mentioned, it is submitted that the first respondent failed to taken into account relevant considerations such as:

108.1.1.1. the cumulative impacts of the project and other developments in the region;
108.1.1.2. the air quality impacts of the project;
108.1.1.3. the impacts on the water resource;
108.1.1.4. the impacts on groundwater;
108.1.1.5. the health impacts of the project;
108.1.1.6. feasible and reasonable alternatives; including the "no-go option";

[115] Section 6(2)(e)(iii) PAJA.

108.1.1.7. the climate change impacts and obligations; and

108.1.1.8. the fact that MCWAP2 has not yet been approved.

108.1.2. In addition, the FEIR claims that the project will be beneficial for job creation and will benefit the economy; yet it fails to take into consideration the health impacts, climate change impacts and ultimate external costs that will have to be borne by the state as a result of the project operations.

108.2. **The action itself contravenes a law or is not authorised by an empowering provision**[116]

108.2.1. It is submitted that, for the reasons outlined above, this decision constitutes a direct contravention of the constitutional right to an environmental not harmful to one's health or well-being and to "*have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –*

(i) prevent pollution and ecological degradation;

(ii) promote conservation; and

(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."[117]

108.2.2. As submitted above, it is recorded that this decision contravenes section 24O(1) of NEMA (as the framework legislation to give effect to the constitutional environmental right), which requires that the Minister or MEC responsible must, in considering an application, comply with the provisions of NEMA. It is submitted that the first respondent has failed to comply with the provisions of NEMA in, inter alia:

[116] Section 6(2)(f)(i) PAJA.
[117] Section 24(a) and (b), the Constitution of the Republic of South Africa, 108 of 1996.

108.2.2.1. failing to take into account the relevant factors listed in section 24O(1)(b) NEMA in considering the application, as addressed above; and

108.2.2.2. failing to take into account the comments of SAHRA and/or any other organ of state charged with the administration of any law which relates to the activity in question, as required by section 24O(1)(c).

108.2.3. The authorisation contravenes the requirements of section 51 NEMWA for a WML.

108.2.4. Furthermore, it is submitted that the first respondent was not permitted to base his decision on the allocation of water for the project being obtained from MCWAP 2 or from the allocation to Exxaro, as neither of these have yet been authorised.

108.2.5. It is further submitted that the granting of an authorisation without due consideration of the SAHRA final comments and the palaeontological assessment required by SAHRA in the interim comments, and the failure to reflect these recommendations and this additional information in the authorisation, is in direct contravention of NHRA, NEMA and the requirements for just administrative action outlined in PAJA.

108.3. **The action itself is not rationally connected to the information before the administrator**[118]

108.3.1. The information in the FEIR indicates, inter alia, that:

108.3.1.1. there is a high risk that air quality will be impacted by the project;

108.3.1.2. water availability is likely to be a concern in the future;

[118] Section 6(2)(f)(ii)(bb) PAJA.

108.3.1.3. water for the project is intended to be sourced from MCWAP 2 ultimately and initially from Exarro's allocation, neither of which have yet been approved; and

108.3.1.4. palaeontological impact assessments for the project site were requested, and final comments from SAHRA on the FEIR were required in terms of NHRA, but do not appear, from the FEIR, to have been addressed.

108.3.2. In granting the authorisation, the first respondent demonstrates that he failed to give adequate consideration to the above points in the FEIR. As a result, this decision is not rationally connected to the information that was before the first respondent.

108.4. **The exercise of the power or the performance of the function authorised by the empowering provision, in pursuance of which administrative action was purportedly taken, is so unreasonable that no reasonable person could have so exercised the power or performed the function**[119]

108.4.1. In the circumstances it is submitted that the decision is unreasonable in that it:

108.4.1.1. fails to give recognition to the long-term and cumulative impacts on the resources, particularly water, in the vicinity of the project and to attach sufficient weight to the severity of these impacts (impacts likely to increase in severity as a result of climate change);

[119] Section 6(2)(h) PAJA.

108.4.1.2. fails to attach sufficient weight to the significant health impacts likely to be brought about as a result of the project;

108.4.1.3. fails to take into account climate change and South Africa's international commitments and national obligations in respect of climate change mitigation; and

108.4.1.4. fails to apply the principles and provisions of NEMA and to give recognition to the duty to uphold the constitutional right to an environment not harmful to health or well-being.[120]

CONCLUSION

109. The first respondent's decision to authorise the project is unlawful, in that it failed to comply with NEMA, AQA and NEMWA. It also fails to give effect to the constitutional environmental right.

110. The conditions attached to the first respondent's decision to authorise the project are vague and unenforceable.

111. The Chief Director's decision constitutes unfair administrative action in that:

111.1. it is unlawful;

111.2. irrelevant factors were taken into account and relevant factors not considered;

111.3. the decision is not rationally connected to the information before the Chief Director in making the decision or to the reasons given for it by the Chief Director; and

111.4. the decision is so unreasonable that no reasonable person could have made it.

[120] Section 24 of the Constitution of the Republic of South Africa 108 of 1996.

112. For all of these reasons, the appellant submits that the appeal should succeed and that the environmental authorisation granted to Newshelf by the first respondent should be set aside.

DATED at **CAPE TOWN** on this the **11th** day of **MAY 2015**

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