"original"

IN THE HIGH COURT OF SOUTH AFRICA

GAUTENG DIVISION, PRETORIA

CASE NO: 54087/17

In the matter between:

THE TRUSTEES FOR THE TIME BEING OF GROUNDWORK TRUST Applicant

and

THE MINISTER OF ENVIRONMENTAL AFFAIRS First Respondent

CHIEF DIRECTOR: INTEGRATED ENVIRONMENTAL AUTHORISATIONS, DEPARTMENT OF ENVIRONMENTAL AFFAIRS Second Respondent

THE DIRECTOR: APPEALS AND LEGAL REVIEW DEPARTMENT OF ENVIRONMENTAL AFFAIRS Third Respondent

KUYASA MINING (PTY) LTD Fourth Respondent

KIPOWER (PTY) LTD Fifth Respondent

NOTICE OF MOTION

KINDLY TAKE NOTICE that the Applicant intends to make application to the above Honourable Court, on a date to be determined by the Registrar, for an order in the following terms:

1 The following decisions are reviewed and set aside, and declared invalid:

1.1 the decision of the Second Respondent, dated 21 October 2015 and with DEA reference number 12/12/20/2333, granting the Fourth

Respondent the environmental authorisation for the establishment of a 600 megawatt coal-fired power station and related infrastructure in the Victor Khanye Municipality of Mpumalanga, South Africa (the "**Environmental Authorisation**"); and

1.2 the decision of the First Respondent, dated 8 November 2016 and with reference number LSA 149588, dismissing the Applicant's appeal against the granting of the Environmental Authorisation (the "**Appeal Decision**").

2 The Fourth Respondent's application for environmental authorisation is remitted to the Second Respondent for reconsideration.

3 When reconsidering the Fourth Respondent's application for environmental authorisation, the Second Respondent is directed to consider:

3.1 a climate change impact assessment;

3.2 comment on this assessment from interested and affected parties; and

3.3 any additional information that the Second Respondent may require to reach a decision.

4 In the alternative to prayers 1 to 3 above:

4.1 the Appeal Decision is reviewed and set aside and declared invalid;

4.2 the Applicant's appeal against the granting of the Environmental Authorisation is remitted to the First Respondent for reconsideration;

4.3 when reconsidering the Applicant's appeal against the granting of the Environmental Authorisation, the First Respondent is directed to consider:

4.3.1 a climate change impact assessment;

4.3.2 comment on this assessment from interested and affected parties; and

4.3.3 any additional information the First Respondent may require to reach a decision.

5 Insofar as may be necessary, the period of 180 days referred to in section 7(1) of PAJA is extended to the date of the launch of this application.

6 The costs of this application are to be paid, jointly and severally, by any respondents opposing this relief.

7 Further and/or alternative relief.

TAKE NOTICE FURTHER that the affidavit of **SVEN EATON PATRICK PEEK**, with supporting annexures, will be used in support of this application.

TAKE NOTICE FURTHER that the Applicant appoints the address of its attorneys, as set out below, as the address at which it will accept all process in these proceedings.

TAKE NOTICE FURTHER that:

(a) In terms of Rule 53(1)(a) of the Uniform Rules of Court, the Respondents are called upon to show cause why the decisions referred to in prayers 2 and 3 above should not be set aside;

(b) In terms of Rule 53(1)(b) of the Uniform Rules of Court, the First to Third Respondents (the "**Government Respondents**") are called upon, within fifteen days of receipt of this notice of motion, to despatch to the Registrar the record of all documents and all electronic records that relate to the making of the decisions referred to in prayers 2 and 3 above (the "**Record**"), together with such reasons that the Government Respondents are by law required or desire to give or make, and to notify the Applicant's attorneys that they have done so;

(c) In terms of rule 53(4) of the Uniform Rules of Court, the Applicant may, within ten days of receipt of the Record from the Registrar, amend, add to or vary the terms of its notice of motion and supplement the founding affidavit, by delivery of a notice and accompanying affidavit.

TAKE NOTICE FURTHER that any Respondents that wish to oppose the relief sought are required:

(a) Within fifteen days of receipt of this notice of motion, or any amendment thereto as contemplated in Rule 53(4) of the Uniform Rules of Court, to deliver a notice to the Applicant's attorneys that such Respondents intend to oppose this application;

(b) To appoint an address within fifteen kilometres of the office of the Registrar at which such respondents will accept notice and service of all process in these proceedings; and

(c) Within 30 days of the time period referred to in Rule 53(4) of the Uniform Rules of Court, to deliver any affidavits in answer to the allegations of the Applicant.

KINDLY place the matter on the roll accordingly.

DATED at PRETORIA on this the 4th day of AUGUST 2017

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Ref: Rentia Kruyshaar/CER/RK0049

TO:

The Registrar of the above Honourable Court
PRETORIA

AND TO:

THE MINISTER OF ENVIRONMENTAL AFFAIRS
First Respondent
Environment House
473 Steve Biko
Arcadia, Pretoria

AND TO:

CHIEF DIRECTOR
INTEGRATED ENVIRONMENTAL, AUTHORISATIONS,
DEPARTMENT OF ENVIRONMENTAL AFFAIRS
Second Respondent
Environment House
473 Steve Biko
Arcadia
PRETORIA

AND TO:

THE DIRECTOR: APPEALS AND LEGAL REVIEW,
DEPARTMENT OF ENVIRONMENTAL AFFAIRS
Third Respondent
Environment House
473 Steve Biko
Arcadia
PRETORIA

AND TO:

KUYASA MINING (PTY) LTD
Fourth Respondent
2 Neven Street
Fransville
eMalahleni
Mpumalanga

c/o **MACROBERT ATTORNEYS**
MacRobert Building
Cnr Justice Mahomed & Jan Shoba Streets
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PRETORIA
Tel: 012 425 3400
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AND TO:

KIPOWER (PTY) LTD
Fifth Respondent
2 Neven Street
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IN THE HIGH COURT OF SOUTH AFRICA

GAUTENG DIVISION, PRETORIA

CASE NO:

In the matter between:

THE TRUSTEES FOR THE TIME BEING OF GROUNDWORK TRUST	Applicant
and	
THE MINISTER OF ENVIRONMENTAL AFFAIRS	First Respondent
CHIEF DIRECTOR: INTEGRATED ENVIRONMENTAL AUTHORISATIONS, DEPARTMENT OF ENVIRONMENTAL AFFAIRS	Second Respondent
THE DIRECTOR: APPEALS AND LEGAL REVIEW DEPARTMENT OF ENVIRONMENTAL AFFAIRS	Third Respondent
KUYASA MINING (PTY) LTD	Fourth Respondent
KIPOWER (PTY) LTD	Fifth Respondent

FOUNDING AFFIDAVIT

I, the undersigned

SVEN EATON PATRICK PEEK

state under oath as follows:

1 This application is brought by the trustees for the time being of the groundWork Trust, in their representative capacity.

2 I am an adult male working as the Director of the groundWork Trust ("**groundWork**").

3 groundWork's trustees have approved the institution of these proceedings and have authorised me to depose to this affidavit on groundWork's behalf. I attach a resolution to this effect, marked **Annexure "SP1"**.

4 The facts contained in this affidavit are true and correct and, save where the context indicates otherwise, are within my personal knowledge.

5 Where I make legal submissions, I do so on the advice of the applicant's legal representatives.

PARTIES

6 The applicant, **groundWork**, as represented by its trustees:

6.1 is a non-profit environmental justice service and developmental organisation with NPO-number 045-235-NPO, and with its principal place of business at 6 Raven Street, Pietermaritzburg;

6.2 works on environmental justice and human rights issues, focusing on coal, climate and energy justice, waste, and environmental health;

6.3 works with South and Southern African communities, including the following community groups: South Durban Community Environmental Alliance; the Vaal Environmental Justice Alliance; the Mfuleni Community Environmental Justice Organisation; the South African

Waste Pickers' Association; and the Highveld Environmental Justice Network.

6.4 is a registered interested and affected party ("**I&AP**") in respect of the application process for the environmental authorisation that is the subject of this review application.

6.5 I attach a copy of groundWork's Deed of Trust marked **Annexure "SP2"**.

7 Accordingly, groundWork, as represented by its trustees, has legal standing in terms of section 32(1) of the National Environmental Management Act 107 of 1998 ("**NEMA**") to bring this review application:

7.1 in its own interest, as an I&AP;

7.2 in the public interest; and

7.3 in the interest of protecting the environment.

8 The first respondent is the **MINISTER OF ENVIRONMENTAL AFFAIRS** (the "**Minister**").

8.1 The Minister is cited in her official capacity as the appeal authority in terms of section 43(1) of NEMA;

8.2 This application concerns the Minister's decision, dated 8 November 2016 and with reference number LSA 149588, to dismiss

groundWork's appeal against the granting of an environmental authorisation (the "**Appeal Decision**").

9 The second respondent is the **CHIEF DIRECTOR: ENVIRONMENTAL AUTHORISATIONS, DEPARTMENT OF ENVIRONMENTAL AFFAIRS** (the "**Chief Director**").

9.1 The Chief Director is cited in his official capacity as the competent authority who granted the environmental authorisation, dated 21 October 2015 and with Department of Environmental Affairs ("**DEA**") reference number 12/12/20/2333, that is upheld by the Appeal Decision (the "**Environmental Authorisation**").

9.2 This application also seeks to review and set aside the Environmental Authorisation.

10 The third respondent, **THE DIRECTOR: APPEALS AND LEGAL REVIEW OF THE DEPARTMENT OF ENVIRONMENTAL AFFAIRS** (the "**Appeals Director**") is cited in his official capacity as the authority responsible for administering appeals and making recommendations to the Minister.

11 The fourth respondent, **KUYASA MINING (PTY) LIMITED** ("**Kuyasa**"):

11.1 is a limited liability company duly registered in accordance with the laws of the Republic of South Africa with its registered address at 2 Neven Street, Fransville, eMalahleni, Mpumalanga;

11.2 applied for and was granted the Environmental Authorisation on behalf of its wholly-owned subsidiary, KiPower (Pty) Limited ("**KiPower**"), the fifth respondent in this application;

11.3 appears to be the holding company of KiPower (as detailed below), as well as Delmas Coal (Pty) Ltd ("**Delmas Coal**"), and iKhwezi Colliery (Pty) Ltd ("**iKhwezi Colliery**"):

11.3.1 The operations of Delmas Coal and iKhwezi Colliery are intertwined with the proposed operation of the project subject to the Environmental Authorisation: this project is to be a "mouth of mine" project located within close proximity of and using coal mined from Delmas Coal, whilst the project's ash disposal facility is to be located, in part, on iKhwezi Colliery's unrehabilitated open-cast pit.

11.4 I attach a copy of the SearchWorks CIPC search document confirming the current name and address of Kuyasa marked **Annexure "SP3"**.

12 The fifth respondent, **KiPower**:

12.1 is a limited liability company duly registered in accordance with the laws of the Republic of South Africa with its registered address at 2 Neven Street, Fransville, eMalahleni, Mpumalanga;

12.2 is the wholly-owned subsidiary of Kuyasa;

12.3 appears to be the intended operator of the project subject to the Environmental Authorisation (for subsequent ease of reference, whilst

KiPower is generally referenced as the operator of this project and Kuyasa the holder of the Environmental Authorisation, these two entities may be referred to interchangeably).

12.4 I attach a copy of the SearchWorks CIPC search document confirming the current name and address of KiPower marked **Annexure "SP4"**.

13 Collectively, the first to fifth respondents are referred to as the "**Respondents**", and the first to third respondents as the "**Government Respondents**".

14 The Government Respondents have offices at Environment House, 473 Steve Biko and Soutpansberg Road, Arcadia, Pretoria, 0083, within the jurisdiction of this Court. Accordingly, on this basis alone and in terms of the Promotion of Administrative Justice Act 3 of 2000 (**"PAJA"**), this Court has jurisdiction in respect of this matter.

15 Where appropriate, service will be effected on behalf of the Government Respondents at the offices of the State Attorney Pretoria at SALU Building, 316 Thabo Sehume Street, Pretoria, in accordance with Rule 4(9) of the Uniform Rules of Court.

THE NATURE OF THIS APPLICATION

16 KiPower is seeking to operate a 600 megawatt ("**MW**") independent coal-fired power station with associated infrastructure (also referred to as the "**Project**" or the "**KiPower Project**") near Delmas in Mpumalanga, South Africa.

17 This is an application to review and set aside:

17.1 the Appeal Decision; and

17.2 the Environmental Authorisation

which have the effect of granting Kuyasa, on behalf of its subsidiary KiPower, the environmental authorisation to proceed with establishing the KiPower Project.

18 groundWork brings this application in terms of PAJA and the constitutional principle of legality, in accordance with the requirements of Rule 53 of the Uniform Rules of Court.

19 At this stage, groundWork's grounds of review are as follows:

19.1 The Environmental Authorisation and Appeal Decision being erroneously made in the absence of a climate change impact assessment ("**CCIA**").

19.1.1 In the recent **"Thabametsi Judgment**" as referred to below, this Court held that:

(a) the climate change impacts of a proposed coal-fired power station are required to be assessed and comprehensively considered as part of an environmental impact assessment ("**EIA**") in terms of NEMA before a decision can be made on whether to issue an environmental authorisation; and

(b) further to the requirement in NEMA section 24O(1)(b) to identify relevant impacts and mitigation measures and consider relevant policy and information in deciding whether or not to grant an environmental authorisation, as well as South Africa's international and domestic policy commitments to address climate change, a CCIA was necessary to form a full assessment of the environmental impact of a proposed coal-fired power station prior to its environmental authorisation.

19.1.2 However, the Appeal Decision in the present case directly contradicted this requirement in finding that "*... there is currently no legal basis to inform such* [climate change impact] *assessments within the EIA framework*".

19.1.3 The CCIA of the Project would include both mitigation and adaptation measures and assess, *inter alia,* the impact of any climate change aggravation caused by the Project.

19.1.4 In the absence of a CCIA, the impacts of the Project on climate change, and the converse impacts of climate change on the Project and the surrounding area (including resident communities), could not have been properly considered prior to its environmental authorisation.

19.2 The premise of the Project's need and desirability on the Project's status as a coal baseload independent power producer (or "**Coal IPP**")

providing new coal-based electricity as required under the Integrated Resource Plan for Electricity 2010-2030 ("**IRP**").

19.2.1 The Environmental Authorisation, the Final Environmental Impact report ("**FEIR**"), and the Appeal Decision refer to the KiPower Plant fulfilling the needs forecast in terms of the IRP.

19.2.2 However, KiPower has as yet submitted no bid as a Coal IPP under the IRP's Coal Baseload Independent Power Producer Procurement Programme ("**Coal Baseload IPP Procurement Programme**"): It is uncertain whether the KiPower Project will, in fact, produce power in satisfaction of and in compliance with the IRP requirements, either as a Coal IPP or licensed independently of the Coal Baseload IPP Procurement Programme.

19.2.3 In any event, a CCIA of the KiPower Project must be included in any balanced assessment of the Project's need and desirability, irrespective of the IRP requirements.

19.3 The Minister's consideration of and reliance on groundWork's apparent opposition to the merits of all coal-fired power stations in South Africa when making the Appeal Decision.

19.3.1 Neither groundWork's appeal nor this application concern the merits of all coal-fired power stations in South Africa.

19.3.2 This application is about the requirements that a proposed coal-fired power station, in this instance the KiPower Project,

must satisfy in order to be granted environmental authorisation under NEMA and the Environmental Impact Assessment Regulations, 2010 (the "**2010 EIA Regulations**").

20 Accordingly, the Environmental Authorisation and Appeal Decision are unlawful, irrational and unreasonable; were taken due to considering irrelevant considerations and the failure to account for relevant considerations; and are tainted by material errors of law.

21 I emphasise, however, that groundWork specifically reserves the right to raise further grounds of review after receipt of the Rule 53 record in these proceedings.

22 In this affidavit, I provide further details of groundWork's review as follows:

22.1 the Thabametsi Judgment;

22.2 extension of the period for bringing the review application;

22.3 the factual and legal background to the Environmental Authorisation and Appeal Decision;

22.4 the absence of a CCIA;

22.5 the grounds of review relied on at this stage; and

22.6 the question of remedy.

THE THABAMETSI JUDGMENT

23 On 8 March 2017, a judgment was delivered in this Court by Murphy J concerning the environmental authorisation of the development of a coal-fired power station by Thabametsi Power Company (Pty) Ltd (the "**Thabametsi Judgment**").

24 The Thabametsi Judgment confirmed that the climate change impacts of a proposed coal-fired power station are required to be assessed and comprehensively considered as part of an EIA in terms of NEMA before a decision can be made on whether to issue an environmental authorisation (paragraph 78, 91 *et al* of the Thabametsi Judgment). The Thabametsi Judgment found *inter alia* that:

24.1 neither the macro-level assessments in terms of the IRP and the Department of Energy ("**DOE**")'s determination calling for new coal-fired power, nor the greenhouse gas ("**GHG**") emission quantification process under the National Environmental Management: Air Quality Act, 2004 ("**NEMAQA**"), obviate the decision-maker's duty under NEMA to consider the relevant climate change impacts and mitigation strategies of specific coal-fired power stations located at specific sites: Although "*policy instruments*" would inform an assessment of a station's environmental impact, these did not constitute "*binding administrative decisions*", nor could they alter legislative requirements (paragraphs 95 to 97 and 124 *et al* of the Thabametsi Judgment);

24.2 a formal, "*professionally researched*" expert assessment of climate change impacts is the best evidence that the relevant factor of climate change was considered by the decision-maker, whilst its absence indicates that this factor was not considered (paragraphs 88 and 91 of the Thabametsi Judgment);

24.3 "*(a) climate change impact assessment in relation to the construction of a coal fire (sic) power station ordinarily would comprise an assessment of (i) the extent to which a proposed coal-fired power station will contribute to climate change over its lifetime, by quantifying its GHG emissions during construction, operation and decommissioning; (ii) the resilience of the coal-fired power station to climate change, taking into account how climate change will impact on its operation, through factors such as rising temperatures, diminishing water supply, and extreme weather patterns; and (iii) how these impacts may be avoided, mitigated, or remedied*" (paragraph 6 of the Thabametsi Judgment); and

24.4 the failure to consider such relevant information before granting an environmental authorisation and, correlatively, the lack of rational connection between the information before the decision-maker and the decision made, renders the decision to grant environmental authorisation reviewable (paragraph 101 of the Thabametsi Judgment).

25 On 3 April 2017, groundWork's legal representatives, the Centre for Environmental Rights ("**CER**"), wrote to the Respondents and requested that, in light of the Thabametsi Judgment, the parties agree that:

25.1 the Appeal Decision be reviewed and set aside;

25.2 KiPower conduct and submit a comprehensive CCIA in accordance with the 2010 EIA Regulations;

25.3 the appeal be subsequently remitted to the Minister for reconsideration; and

25.4 the deadline for the filing of a review in terms of section 7(1) of PAJA be extended so that the time period would commence running from the date that KiPower submits a bid under the second bid window of the Coal Baseload IPP Procurement Programme, or any other process in terms of which KiPower intends to commence with the activities authorised by the Environmental Authorisation.

(The "3 April correspondence" as attached marked Annexure "**SP5**")

26 MacRobert Attorneys, on behalf of Kuyasa and KiPower, ("**MacRobert Attorneys**") responded to the 3 April correspondence on 3 May 2017 (the "**3 May correspondence**" as attached marked **Annexure "SP6"**), agreeing that:

26.1 KiPower and Kuyasa would proceed with a CCIA; and

26.2 approaching the High Court for purposes of setting aside the Minister's Appeal Decision on the basis of the absence of a CCIA, and to have

the matter remitted to the Minister after completion of the CCIA, was "*in principle*" the appropriate course of action.

27 Further, it was proposed in the 3 May correspondence that:

27.1 the Minister should be the applicant in the review application because of the import of CCIAs, and their application within the context of EIAs, from a regulatory policy perspective; and

27.2 the Minister agree to the proposed approach in principle prior to the parties finalising the application by agreement.

("**MacRobert's Proposal**")

28 groundWork brings this application, notwithstanding the above agreement, because, as explained below, the Government Respondents have as yet failed to confirm the approaches proposed in either the 3 April or 3 May correspondence.

EXTENSION OF THE PERIOD FOR BRINGING THIS APPLICATION

29 Section 7(1) of PAJA provides that a review application must be instituted without unreasonable delay and no later than 180 days from the date on which internal remedies are exhausted. I am advised that the 180 day period expired on 8 May 2017, this being 180 days from the date of the Appeal Decision.

30 However, section 9(1)(b) of PAJA provides that the period of 180 days may be extended for a fixed period by agreement between the parties or, failing such

agreement, by a court or tribunal on application by the person or administrator concerned.

31 In the present case, the parties have agreed to extend the period of 180 days by 90 days to 7 August 2017.

31.1 As detailed above, the CER sent the 3 April correspondence to the Respondents pursuant to the Thabametsi Judgement and well within the 180 day period. In the 3 April correspondence, the CER requested *inter alia* an extension of the deadline for the filing of the review so that the time period would commence running from the date that KiPower submits a bid under the second bid window of the Coal Baseload IPP Procurement Programme, or any other process in terms of which KiPower intends to commence with the activities authorised by the Environmental Authorisation.

31.2 In answer to the 3 April correspondence, and as attached marked **Annexures "SP7"**, **"SP8"** and **"SP9"**, the Respondents requested an extension for their response until 2 May 2017 to obtain the necessary input and achieve an "*expedient and collaborative approach to the regulatory matter at hand*" (the "**2 May extension**").

31.3 As reflected in the attached **Annexures "SP10"** and **"SP11"**, groundWork indicated that it agreed to the 2 May extension, provided that the Respondents either:

31.3.1 agreed to extend the 180 day period for filing a review application under PAJA as outlined at paragraph 30 above; or

31.3.2 undertook not to oppose groundWork's application for condonation for the late filing of the review, should that be required.

31.4 On 13 April 2017, MacRobert Attorneys agreed to extend the period for review to a further 90 days from the date of the anticipated 2 May extension response, should this be required (as set out in Annexure "SP9"). In the 3 May correspondence (Annexure "SP6" as set out at paragraph 26), MacRobert Attorneys subsequently confirmed its client's undertaking of a CCIA and proposed procedure for the review application.)

31.5 On 4 May 2017, the Appeals Director sent an email to CER on behalf of the Government Respondents advising that the Minister had agreed to a 90 day extension in respect of the review deadline of 8 May 2017 (ie. until 7 August 2017) and that they would revert once they had taken further instructions from the Minister on this matter. A copy of this email, the "**Government Respondents' 4 May correspondence**", is attached marked **Annexure "SP12"**.

31.6 Subsequent to the Government Respondents' 4 May correspondence, 7 August 2017 has been referenced as the extended deadline in the CER's further correspondence with the Respondents (see paragraphs 63 and 65 below).

32 This application will be launched within the agreed extended deadline of 7 August 2017. Accordingly no need for condonation arises.

33 In the alternative, however, should this Court find that it is necessary for the Court to extend the 180 day period to the date of the launch of this application, I submit that this is plainly in the interests of justice in view of the facts and circumstances set out in this affidavit and pray for such an order.

FACTUAL AND LEGAL BACKGROUND

34 In this section, I set out the factual and legal background to the Environmental Authorisation and Appeal Decision.

Kuyasa's Application for Environmental Authorisation of the KiPower Project

35 In terms of section 24 of NEMA, environmental authorisation is required before any work may commence on constructing the Project.

36 Further, should KiPower be selected as a preferred bidder under the Coal Baseload IPP Procurement Programme in respect of the Project, it requires an environmental authorisation in order to satisfy the Legal Qualification Criteria set out in the Request for Proposals (as detailed at paragraph 77 below).

37 Environmental authorisations are regulated by chapter 5 of NEMA and the Environmental Impact Assessment Regulations promulgated in terms of NEMA.

38 An application for environmental authorisation must be made to the competent authority designated for the particular listed activity. In this case, the competent authority was the Chief Director.

39 Kuyasa's application for environmental authorisation in respect of the KiPower Project was made and considered under the 2010 EIA Regulations.

39.1 The 2014 Environmental Impact Assessment Regulations (the "**2014 EIA Regulations**") subsequently came into force in December 2014.

39.2 In terms of the transitional provisions, the 2010 EIA Regulations continued to apply to all pending applications and appeals.

39.3 As a result, the 2010 EIA Regulations applied to Kuyasa's application.

40 Once an application for environmental authorisation has been made, an EIA process must be undertaken. The applicant must appoint an independent environmental assessment practitioner ("**EAP**") to conduct this process.

41 Following its appointment in terms of regulations 16 and 17 of the 2010 EIA Regulations, the EAP proceeded to undertake the required scoping and EIA process for the Project. This requires assessing all the potential environmental impacts associated with the Project and proposing appropriate mitigation and management measures in an Environmental Management Programme.

42 As summarised below, groundWork submitted a number of comments during this process:

42.1 On 18 May 2012, 14 August 2013, and 17 October 2013, groundWork submitted initial comments in respect of the Project and in respect of which it received no substantive formal response. These initial comments, a copy of which is attached marked **Annexure "SP13"**, included submissions on the effect of the Project on global warming and climate change.

42.2 On 4 April 2014, following the EAP's circulation of the draft Environmental Impact Report ("**DEIR**"); Environmental Management Programme; and Waste Management Licence Application Report, the CER submitted comments on behalf of groundWork in respect of the draft documents, as attached marked **Annexure "SP14"** (the "**4 April 2014 comments**"). The 4 April 2014 comments included submissions on:

42.2.1 the failure to establish the need and desirability of the Project;

42.2.2 the failure to assess the cumulative effect of emissions around the proposed location of the Project;

42.2.3 the effect of the Project on vital water sources; and

42.2.4 the failure to consider the impact of the Project on climate change.

42.2.5 On 13 May 2014, the EAP published the FEIR as well as the Environmental Management Programme and Waste Management Licence Application Report in final form. On 3 June 2014, the CER submitted comments on these documents

on behalf of groundWork as attached marked **Annexure "SP15"** (the "**3 June 2014 comments**"). The 3 June 2014 comments included the failure of these documents to address the majority of the 4 April 2014 comments, either adequately or at all.

42.3 On 27 March 2015, the EAP circulated a draft addendum to the FEIR (the "**Draft Addendum**"), ostensibly in response to the Chief Director's request for additional information of 4 February 2015 (the "**DEA's Request for Information**"). A copy of this request, signed on the Chief Director's behalf by the Director: Integrated Environmental Authorisations, is attached marked **Annexure "SP16"**.

42.4 The CER, on groundWork's behalf, commented on the Draft Addendum on 30 April 2015 (the "**30 April 2015 comments**", attached as **Annexure "SP17"**). The 30 April 2015 comments pointed out that the Draft Addendum did not address the majority of the 4 April and 3 June 2014 comments, or the Chief Director's queries and concerns as raised in the DEA's Request for Information.

42.5 On 6 May 2015, the EAP published the final addendum to the FEIR (the "**Final Addendum**"). On 20 May 2015, the CER (on behalf of groundWork) commented on the Final Addendum and again pointed out the failure to address the majority of the 4 April and 3 June 2014 comments, or the queries and concerns raised in the DEA's Request for Information (see attached marked **Annexure "SP18"**).

The decision to grant the Environmental Authorisation

43 On 21 October 2015, the Chief Director granted the Environmental Authorisation for the KiPower Project as attached marked **Annexure "SP19"**. groundWork was provided with the Environmental Authorisation by email dated 22 October 2015, as evidenced by **Annexure "SP20"**.

44 In granting the Environmental Authorisation, the Chief Director found that the authorised activities would not conflict with the NEMA objectives of integrated environmental management and that "*any potentially detrimental environmental impacts resulting from the activity can be mitigated to acceptable levels*" following the conclusions *inter alia* that:

44.1 the impact assessment procedure was "*adequate for the decision-making process*" (section 2(c) page 26);

44.2 "*[t]he proposed mitigation of impacts identified and assessed adequately curtails the identified potential impacts*" (section 2(d) page 26); and

44.3 the need and desirability of the Project had been demonstrated, including that the Project would contribute to fulfilling the needs forecast by the IRP (section 2(b), page 25).

45 The Environmental Authorisation is an integrated environmental authorisation as envisaged by section 24L of NEMA, regulation 36(3) of the 2010 EIA Regulations, and section 44 of the National Environmental Management:

Waste Act 59 of 2008 ("**NEMWA**"), because it also serves as a waste management licence in terms of NEMWA.

The appeal to the Minister

46 On 10 November 2015, the CER on behalf of groundWork, duly submitted a notice of intention to appeal the Environmental Authorisation, in accordance with regulation 60(1) of the 2010 EIA Regulations. This appears from the notice attached as **Annexure "SP21"**.

47 Section 43 of NEMA designates the Minister as the relevant appeal authority. Section 43(6) of NEMA affords the Minister wide powers on appeal, including the powers to "*confirm, set aside or vary the decision, provision, condition or directive or make any other appropriate decision.*"

48 Pursuant to NEMA section 43(7), an appeal under section 43 "*suspends an environmental authorisation, exemption, directive, or any other decision made in terms of* [NEMA] *or any other specific environmental management Act, or any provision or condition attached thereto*."

49 I am advised that new regulations on appeals (the 2015 National Appeal Amendment Regulations) were published on 12 March 2015. Regulation 3 stipulates that an appeal lodged against a decision taken in terms of the 2010 EIA Regulations must be dispensed with in terms of the 2010 EIA Regulations, as if they had not been repealed. As a result, groundWork's appeal followed the procedures prescribed in the 2010 EIA Regulations.

50 On 10 December 2015, groundWork's appeal submissions were submitted to the Minister, directed at the Appeals Director (the "**Appeal Submissions**"). I attach a copy of the Appeal Submissions, without annexures, marked **Annexure "SP22"**. The grounds of appeal included, *inter alia*, that the Chief Director:

50.1 failed to take into account South Africa's international and national obligations to mitigate and take positive steps against climate change (paragraphs 83, 84, 103 to 118, and 135 to 140 *et al* of the Appeal Submissions);

50.2 failed to apply the risk-averse and cautious approach necessitated in decision-making under NEMA, in that it granted the Environmental Authorisation without a proper assessment of the consequences. In particular, "*the Authorisation was granted without adequate information about the full implications of the Project for health and for its contribution to climate change and adaptation to a changed climate*" (paragraph 98 of the Appeal Submissions);

50.3 failed to take into account all relevant factors as required by section 24O(1) of NEMA, including the Project's operation within the Highveld Priority Area ("**HPA**"), and any adopted guidelines, departmental policies and environmental management instruments (paragraphs 92 and 120 of the Appeal Submission); and

50.4 erroneously equated the need and desirability of the authorised activities with the requirements of the IRP (paragraph 143 of the Appeal Submissions).

51 On 28 January 2016, the EAP submitted the Appeal Response in reply to the appeal on Kuyasa's behalf. I attach a copy of the Appeal Response as **Annexure "SP23"**.

52 On 4 March 2016, the CER on behalf of groundWork, submitted an answer to the Appeal Response. I attach a copy of this statement, without annexures, as **Annexure "SP24"**.

The Appeal Decision

53 On 8 November 2016, the Minister issued the Appeal Decision as attached marked **Annexure "SP25"**.

54 The Minister found that the NEMA principles, in particular those relating to integrated environmental management, had been met "*by the Department in respect of the application before it*":

54.1 She found that the EIR extensively assessed the potential environmental impacts (Appeal Decision section 5.1 page 12).

54.2 She stated that the FEIR took note of the cumulative impacts associated with the construction of power station (Appeal Decision section 5.1 page 13).

54.3 She found that certain negative impacts are unavoidable in such a development and was satisfied that these impacts were identified and adequately assessed with mitigation measures put in place "*having considered all relevant specialist reports*" (Appeal Decision section 5.1 page 14).

54.4 She found that that there is currently no legal basis to inform a CCIA:

> *"Whilst the appellants' contentions in respect of the necessity to undertake a climate change impact assessment are noted, it must be emphasised that although South Africa has confirmed its nationally determined contribution at an international level, through its adoption of the Paris Agreement on Climate Change in December 2015, there is currently no legal basis to inform such assessments within the EIA framework.*
>
> *Notwithstanding the above, the applicant will be allocated a carbon budget as soon as it becomes operational, should it obtain the requisite authorisations and be awarded preferred bidder status by the Department of Energy. This measure is one of the measures designed to reduce the country's greenhouse gas (GHG) emissions and to keep South Africa's emissions within its NDC."*
>
> (Our emphasis)
>
> (Appeal Decision section 5.3 page 18)
>
> *"once pollution prevention plan regulations are promulgated and GHGs are declared as priority pollutants, the applicant will be required to outline how it plans to reduce GHGs as well as to submit its annual progress reports in respect thereof...."*
>
> (Appeal Decision section 5.3 page 19)

54.5 She noted Kuyasa's concession that the Project's carbon dioxide emissions would be an unmitigated impact from a climate change perspective and its contention "*that the polluter pays principle would apply via carbon taxes when such regulations are implemented in South Africa*" (Appeal Decision section 5.3 page 18).

55 The Minister decided that the information indicated:

> *"that the socio-economic specialist study concludes that the proposed development is expected to produce a number of employment opportunities and is estimated to inject approximately R800 billion into the region's economy, while at the same time fulfilling the country's electricity requirements." (emphasis added)*

56 The Minister found that groundWork held the "*untenable*" view that all coal-fired power stations should be refused due to their contribution to global CO2 emissions (Appeal Decision section 5.1 page 13 and section 5.3 page 19).

Events subsequent to the Thabametsi Judgment

57 As set out at paragraph 24 above, on 8 March 2017 the Thabametsi Judgment confirmed that the climate change impacts of a proposed coal-fired power station are required to be assessed and comprehensively considered as part of an EIA in terms of NEMA before a decision can be made on whether to issue an environmental authorisation.

58 Consequently, in the 3 April 2017 correspondence (Annexure "SP5"), groundWork requested that the Respondents agree to the review and setting aside of the Appeal Decision, with the appeal to be remitted to the Minister for consideration following Kuyasa's undertaking and submission of a comprehensive CCIA in accordance with the 2010 EIA Regulations (see paragraph 25 above).

59 As set out above, in the 3 May correspondence MacRobert Attorneys communicated that Kuyasa was set to proceed with a CCIA in relation to the Project and confirmed that Kuyasa was in agreement that approaching the

High Court for purposes of setting aside the Minister's Appeal Decision on the basis of the absence of a CCIA, and having the matter remitted to the Minister after completion of the CCIA, was "*in principle*" the appropriate course of action (see Annexure "SP6" at paragraph 26).

60 However, and as detailed below, groundWork has not received a formal, substantive response from the Government Respondents in this regard. Therefore it is not clear what the position of the Government Respondents is in relation to the need for a CCIA and the setting aside of the Environmental Authorisation, in light of the Thabametsi Judgment.

61 In response to the 3 May correspondence, CER advised, on 10 May 2017, that groundWork was prepared to agree with MacRobert's Proposal in principle, but reserved its rights until confirmation of the Minister's position (**Annexure "SP26**" attached).

62 Despite the CER's numerous follow-up telephone calls and emails to the Government Respondents, groundWork has not yet received a response from the Government Respondents as to whether they would be amenable to the matter proceeding on an unopposed basis and/or whether the Minister, in accordance with MacRobert's Proposal, would be prepared to institute the review. Copies of the CER's email correspondence to the Government Respondents in this regard dated 22 May 2017, 5 June 2017 and 15 June 2017 are attached marked **Annexures "SP27"**, "**SP28**" and "**SP29**".

63 In the 15 June correspondence (Annexure "SP29"), which was copied to MacRobert Attorneys, the CER requested that the Minister respond as a matter of urgency and by no later than 30 June 2017, as it was imperative that groundWork revert to MacRobert's Proposal without further delay, and as the agreed extended deadline for the review of 7 August was fast-approaching. Failing the Minister's response, the CER would have no option but to accept that the Minister had not agreed to proceed by agreement and/or to be the applicant in the review application, and would proceed to institute the review application.

64 On 30 June 2017, CER received an email from Linda Garlipp at DEA stating: "*I regret to inform you that we have not as yet managed to secure a meeting with Minister. We have also received no instruction from her yet. The Minister has currently an excessive workload and meeting schedule*." This email is attached marked **Annexure "SP30"**.

65 CER wrote to MacRobert Attorneys on 3 July 2017, in copy to the Government Respondents, advising that it had not received a response from the Minister and that, as MacRobert's Proposal had not come to fruition and as groundWork had only until 7 August 2017 to institute review proceedings, groundWork must regard MacRobert's Proposal as falling away and prepare to institute the review. A copy of this letter (the "**3 July correspondence**") is attached marked **Annexure "SP31"**.

66 In the 3 July correspondence, the CER asked MacRobert Attorneys whether (as previously agreed) its client was proceeding with a CCIA and had taken

any steps in this regard. MacRobert Attorneys responded on 12 July 2017 that that its client would be undertaking the CCIA as part of an application for the amendment of the EA, and pursuant to a decision to utilise allegedly more efficient technology which would reduce emissions and increase the Plant's gross power output. In light of this proposed amendment application, MacRobert Attorneys submitted the current review proceedings to be "*academic and premature*" (see the attached **Annexure "SP32"**).

67 I am advised that these review proceedings are neither academic nor premature: It is both inappropriate and legally impermissible to utilise an amendment process to challenge the decision to issue the EA because an appeal of an amendment would be restricted to the amendment decision. The CER responded accordingly on 17 July 2017 (**Annexure "SP33"**).

68 I am further advised that, given that the climate change impacts of the Project needed to be assessed before a decision could have been made to authorise the Project or to uphold the authorisation (as decided in the Appeal Decision), it would not be sufficient for Kuyasa to simply conduct a CCIA while the Environmental Authorisation remains in place.

Need and Desirability of the Project

69 The need and desirability of the Project is premised on the IRP developed by the DOE, which provides that 6.3 gigawatts ("**GW**") of coal-based electricity is required to meet South Africa's energy demands, of which a portion must be

acquired from IPPs. (To avoid prolixity I have not attached the IRP, but relevant pages can be provided as necessary.)

70 Accordingly, Kuyasa's justification of the Project's CO2 emissions as set out at paragraph 89 is that "*South African energy demands indicate that its reliance on coal for energy needs will continue to grow in the foreseeable future and this project can form part of the suite of projects to meet that energy need*" (FEIR section 9.4 page 204).

71 At annexure I, 2(b) of the Environmental Authorisation (titled Reasons for the Decision), the Chief Director finds that:

> *"The need and desirability of the activity has been demonstrated. The Integrated Resource Planning Document dated 25 March 2011 (Revision 2), from the Department of Energy, forecasts energy and electricity needs to 2030, which includes electricity generation from coal."*
>
> (See Annexure "SP19" above)

72 The Appeal Decision refers to the fulfilment of "*the country's electricity requirements*" (paragraph 55 above with reference to Annexure "SP25").

73 Flowing from the requirements of the IRP, in December 2012, the Minister of Energy issued three determinations regarding the procurement of electricity generation capacity from IPPs by Eskom, in terms of section 34(1) of the Electricity Regulation Act 4 of 2006.

74 These determinations include one for 2 500 MW of base-load coal powered energy from "*new build*" Coal IPPs for connection to the grid between 2014 and 2024 under the Coal Baseload IPP Procurement Programme.

75 Tenders under the Coal Baseload IPP Procurement Programme are to be awarded following a competitive bidding process.

76 On 15 December 2014, the DOE issued the Request for Qualifications and Proposals for New Generation Capacity (the "**Request for Proposals**"), which sets out the procedures and requirements for this bidding process.

77 The Legal Qualification Criteria, incorporated as part 1 of volume 2 in the Request for Proposals, state that, in order for a bid to be considered, a project must, *inter alia*, meet the following specific qualification criteria in paragraph 4.1, by having the following in place when a bid response is submitted:

77.1 an environmental authorisation in the name of the project company for the whole of the project;

77.2 a written confirmation of a water allocation for all the water consumption needs of the project from a water services provider, or a written non-binding confirmation of water availability for the project from the Department of Water and Sanitation ("**DWS**");

77.3 a fully developed integrated water use licence application ("**IWULA**") or a water use licence application ("**WULA**"), which is ready for

submission and processing with the relevant provincial branch of the DWS if the applicant is appointed as a preferred bidder;

77.4 written confirmation from DWS that the IWULA or WULA is fully developed, has satisfied the DWS's pre-application requirements, and is ready for submission, should the bidder be appointed as preferred bidder; and

77.5 a waste management licence.

(I have not attached the Legal Qualification Criteria, to avoid prolixity, but can make this documentation available as necessary.)

78 The Coal Baseload IPP Procurement Programme will consist of several bidding windows. According to the Request for Proposals, first phase projects must be capable of beginning commercial operation before the end of December 2021.

79 The first phase bid submission deadline was extended to 2 November 2015. As reflected in the correspondence attached marked **Annexure "SP34"**, on or about 26 November 2015, the CER were informed that the bid in respect of the KiPower Project would be submitted during the second phase bidding window on 8 March 2016.

80 Currently, the second bid phase of the Coal Baseload IPP Procurement Programme is indefinitely postponed. A copy of the delay notification, as

reflected on the Coal Baseload IPP website, is attached marked **Annexure "SP35".**

81 As attached marked **Annexure "SP36",** on or about 11 April 2017, the EAP for the KiPower Project communicated that Kuyasa's "*business decision*" as to whether it would proceed with the KiPower Project would be taken "*irrespective of whether it is appointed a preferred bidder in terms of any further CBLIPPPP bid window*". This implies that the Project might apply for licensing by the National Energy Regulator of South Africa outside of the ambit and controls of the Coal Baseload IPP Procurement Programme, with the power produced sold privately (rather than to Eskom).

82 In light of the uncertainty of the role the Project is to play in the production and supply of power, its operation in compliance with and satisfaction of the IRP requirements cannot be assumed: Any conclusion of the need and desirability on this basis is preliminary and fatally flawed.

The proposed KiPower Project

83 The Project, as further detailed below, is described in the FEIR submitted in respect of the Environmental Authorisation. I attach the executive summary of the FEIR, together with other relevant pages of the FEIR, as **Annexure "SP37"**.

84 The KiPower Project is to include:

84.1 a 600 MW power plant, comprising four circulating fluidised bed ("**CFB**") units to burn coal and produce electricity;

84.2 an ash disposal facility ("**ADF**") to store the ash generated from the power plant (and of which iKhwezi Colliery's unrehabilitated Pit H is to form part);

84.3 a number of transportation routes (and associated service roads) to and from the KiPower Project including:

84.3.1 bridges over the Wilge River to link the power plant (to the west of the river) and the ADF (to the east of the river) and to function as: (i) a conduit for the ash conveyor, water pipelines and other utilities; and (ii) a road bridge;

84.3.2 a conveyor of approximately 1722m long to transfer coal and sorbent from Delmas Coal to the power plant and a sorbent conveyor of approximately 812m long to transfer sorbent from the rail yard to overland coal conveyors; and

84.3.3 the extension of the Delmas Coal railway: (i) by approximately 400m to the north; (ii) to the south to allow train redirection; and (iii) for the provision of a sorbent offloading facility.

85 As reflected in the map attached as **Annexure "SP38"** the intended location of the KiPower Project, as well as the location of Delmas Coal and iKhwezi Colliery, is approximately 23km to the south-east of the town of Delmas in the Victor Khanye Municipality within the Nkangala District Municipality of

Mpumalanga, South Africa. Eskom's Kendal, Kriel, and Matla power stations are within a 20km to 31km radius of this intended location.

86 The executive summary to the FEIR details that the KiPower Project proposes to use the discard low-grade coal of Delmas Coal and to rehabilitate iKhwezi Colliery's open cast Pit H for use as part of the ADF.

87 According to the HPA Air Quality Management Plan, as defined below, the use of low grade coal in coal-fired power stations requires large quantities of coal used as a fuel source, resulting in relatively high gaseous and particulate emissions (HPA Management Plan section 4.2.2.1 page 98).

88 I am advised that because the fuel value of the low grade coal is about half that of regular coal, the Project will generate at least twice as much coal ash as that of regular coal.

89 According to the FEIR:

89.1 the approximately 4.2 million tonnes/annum CO2 emissions from the KiPower Plant will have a significant effect due to the anticipated climate change impacts with no "*economically viable*" mitigation possible (FEIR section 9.2.1.1 page 162); and

89.2 the South African energy sector produces significant CO2 emissions due to its reliance on coal-fired power stations and natural gas and the KiPower Project would expand this coal-fired power generation capacity (FEIR section 9.4 page 204).

90 There is no further assessment of CO2 emissions within the narrower scope of the Air Quality Impact Assessment for the KiPower Project (the "**AQIA**"), or the Project's atmospheric emission licence ("**AEL**") application.[1]

91 In any event, and as set out in more detail below, an assessment of CO2 emissions is unlikely to be accurate unless it considers the full lifecycle of these emissions – including emissions from construction and decommissioning of the power station, as well as indirect emissions from activities linked to the power station operation, such as transportation and mining. In considering climate change impacts it is also necessary that the emissions of GHGs other than CO2 be considered; such as methane and nitrous oxide.

92 As I will explain in greater detail below, the proposed location of the KiPower Project is in a water stressed and hydrologically sensitive region and falls within the HPA, declared as such due to its high levels of air pollution. Because of this environmental sensitivity, not only will the Project have directly significant implications from an environmental and human health perspective on the water resources and air quality in the area, but the cumulative impacts of the Project, through its emissions and by virtue of its operational requirements and processes, are particularly likely to aggravate the effects of climate change.

[1] The AEL application, in any event, is part of a separate decision-making process, which appears to have been concluded in 2014, (the AEL application was submitted and published for comment, as an appendix (appendix E) to the FEIR).

The Highveld Priority Area

93 The HPA is an area of poor air quality due to "*the concentration of industrial and non-industrial sources*" in the area (page vii of the Highveld Priority Area Air Quality Management Plan promulgated in Government Notice 144 of 2 March 2012 (the "**HPA Management Plan**")).[2] As set out in the FEIR (page 204) "*(a)ir quality in the region is poor due to the concentration of power generation and other significant coal-reliant industries in the region.*"

94 The HPA Management Plan identifies industrial sources as "*by far the largest contributor of emissions in the HPA, accounting for 89% of PM10, 90% of NOx and 99% of SO2*", with major industrial source contributors including power generation and coal mining. (HPA Management Plan page x).

95 The HPA was declared a priority area in Government Notice 1123 of 23 November 2007 in terms of section 18(1) of NEMAQA, which allows the Minister or MEC to declare a priority area upon the reasonable belief that:

> *"(a) ambient air quality standards 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*
>
> *(b) the area requires specific air quality management action to rectify the situation."*

96 Accordingly, the HPA Management Plan is concerned with the on-going rectification of poor air quality in the area, regardless of whether the nature of

[2] I have not included a copy of the HPA Management Plan to avoid prolixity, but will make a copy available as necessary.

the air quality is put at risk by past developments or is to be put at risk by future developments. As set out in the HPA Management Plan:

96.1 the goals of the HPA Management Plan are prospective and include the achievement of an equitable reduction in industrial emissions by 2020 so as "*to achieve compliance with ambient air quality standards and dust fallout limit values*" (page xvi);

96.2 the objectives of HPA Management Plan include its recognition of development planning as an ongoing activity, with air quality to be included in environmental decision-making tools for land use planning (page xxi); and

96.3 on-going evaluation is specified as an essential element of implementing air quality management planning (section 8.2, page 130).

97 The HPA Management Plan is concerned with the total estimated emissions of the HPA. Whereas it focusses on reducing the HPA's excessive ambient air quality standards of particulate matter (PM), sulphur dioxide (SO2), nitrogen oxides (NOx) and ozone (O3), its objectives include the reduction of GHG emissions by *inter alia* considering climate change implications in air quality management decision making as an on-going activity in order to reduce industrial emissions by 2020 (page 118).

98 The DEA's own reports reflect that there remains widespread non-compliance with ambient air quality standards within the HPA. By way of an example, the

most recent DEA report presented at a HPA meeting on 25 May 2017 is attached marked **Annexure "SP39"** and reveals significant ongoing exceedances of these standards.

99 These exceedances are even more significant when gauged relative to the stricter ambient air quality standards for PM2.5 applicable from 1 January 2016.[3]

100 Over and above its general location within the HPA, the Project is to be located in an area of the HPA that experiences specific ambient air quality exceedances: The AQIA reflects extended daily particulate exceedances at Delmas Coal with the SANS alert level (2400 mg/m².day) "*exceeded by all samples (including the average of all samples) for a large portion of the time*" (AQIA 5.2.1 and 5.2.2 pages 34- 38).

101 Further, given air's diffusive nature, the rectification of poor ambient air quality can only be achieved by the holistic management of air quality in the area.

102 It is clear that the purpose of the HPA Management Plan – to ensure compliance with air quality standards is achieved and maintained – is contradicted by allowing further developments like the Project to be located within the HPA.

[3] GN 486 of 29 June 2012: National ambient air quality standard for particulate matter with aerodynamic diameter less than 2.5 micron metres (PM2.5) (Government Gazette No. 35463).

103 In any event, as an industrial power generation project within the HPA, the full life cycle of the Project must be carefully considered and evaluated in light of its cumulative and singular impacts on air quality and, more broadly, climate change.

104 Any such evaluation must include consideration of the increased capacity demands on Delmas Coal – and corresponding increased mining impacts - in satisfaction of the Project's coal supply. Whereas Delmas Coal produces 1.92 million tons of coal a year (AQIA, Appendix L to the FEIR (annexure "SP37") 5.2 page 34), the Project would consume about 2.8 million tons of coal a year (FEIR 2.3.4.1, page 29).

Location within hydrologically sensitive area

Surface Water Quality

105 The proposed site of the KiPower Project spans the Wilge River (with the power plant to the west and the ADF to the east of the river). As set out in the FEIR, the hydrological sensitivity of the Wilge River is significant, in particular because the primary aquifer in the area is highly susceptible to surface-induced impacts and activities due to its intrinsic unconfined and semi-unconfined piezometric conditions (FEIR section 4.4.3 page 81).

106 The FEIR specifically acknowledges that the DWS has publicised its intention to declare the Wilge River catchment "*a Class 2 river system in order to seek*

to protect Mpumalanga's water resources", meaning that "*no new impacts will be tolerated within this catchment*" (FEIR page 86).

107 The declaration of the Wilge River catchment as a class 2 river system under the "**Water Classification Regulations**" (Government Notice 810, GG33541, of 17 September 2010 in terms of the National Water Act 36 of 1998 (the "**NWA**")) was promulgated in Government Notice 486, GG 39943, of 22 April 2016 (the "**Olifants Catchment Classification Notice**").

108 The Olifants Catchment Classification Notice further specifies the flow rate to be maintained on the Wilge River: This differs monthly depending on normal flow and drought conditions (pages 13 to 14 of the Olifants Catchment Classification Notice).

109 The Wilge River forms part of the Olifants Catchment Water Management Area and the largest sub-catchment of the Limpopo Basin (FEIR section 4.6 page 85).

110 The Wilge and Olifants Rivers are both stressed catchments, due to the extent of coal mining and industrial development in the region, and have little or no assimilative capacity for additional pollutants (FEIR section 4.11.1 page 104).

111 The Olifants River, which flows through the Kruger National Park and into Mozambique before joining the Limpopo River:

111.1 is facing a water quality crisis largely due to acid mine drainage from decanting coal mines. Relevant excerpts of the National Water Resource Strategy, Second Edition of June 2013, and of the Integrated Water Quality Management Plan for the Olifants River System, 2016 are attached marked **Annexures "SP40"** and "**SP41**", in support of this;[4]

111.2 further to the Olifants Catchment Classification Notice, is categorized as a class 3 river system under regulation 3(c) of the Water Classification Regulations, meaning it is heavily used and has been significantly altered from its pre-development condition.

112 In particular because of this hydrological sensitivity and the far-reaching effects of the contamination of the Wilge River, the hydrological impacts of the Project must form part of an holistic CCIA.

113 Correlatively, and because the KiPower Project relies on the constant full functioning of mitigation measures to prevent any pollutants flowing into the river catchments (Section 4.11.1, page 104, of the FEIR), an assessment of these mitigation measures must account for the effects of climate change, including events of extreme water levels and flow.

[4] The Association for Water and Rural Development explains that: "*The Olifants River and its contributing waterways are critical for supporting life in the area, yet unchecked pollution, inappropriate land and resource use, weak and poorly enforced policies and regulations, and poor protection of habitats and biodiversity are degrading the Olifants at an alarming rate.*" (Association for Water and Rural Development, Olifants River Basin, http://award.org.za/resilim-o/olifants-river-basin/).

Groundwater Quality

114 The FEIR details the Project's location above a shallow, weathered aquifer "*highly susceptible to surface induced impacts and activities, due to the unconfined and semi-unconfined piezometric conditions that occur within the aquifer*" (FEIR page 81).

115 The DEA's Draft 3rd National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), excerpts of which are attached as **Annexure "SP42"**, looks at climate change over South Africa in terms of trends and projected changes. It specifies that "*(g)roundwater needs to be protected, and its use and maintenance adapted to climate change. Preventing groundwater degradation and unwise exploitation will prove more cost-effective than trying to clean up and restore mismanaged aquifers*" (section 3.6.9.4.2, page 369). This is particularly applicable to water deficit areas reliant on groundwater use (see further below).

116 Again:

116.1 these factors should be included in an holistic CCIA of the Project; and

116.2 the assessment of mitigation measures purporting to prevent groundwater pollution must account for climate change effects.

Water Quantity

117 Mpumalanga, the province in which the KiPower Project is to be located, is known to be a water stressed area: it was declared a drought disaster area by notice in Government Gazette 2619 on 4 December 2015.

118 The FEIR outlines the proposed location of the KiPower Plant as a water deficit area, with the area's numerous developments placing "*an enormous demand on the water supply*": because the area's water demand (of approximately 18 megalitres per day (Ml/day) outstrips its borehole water supply (of approximately of 16Ml/day), Rand Water is used as a supplementary water provider (FEIR page 98).

119 According to Kuyasa's Appeal Response (annexure "SP23"), the water needs of the KiPower Plant would add further demands on the already strained water resource of around 1788m^3/day in the dry season and 1094m^3/day in the rainy season.

120 This notwithstanding, the Appeal Response maintains that, because Rand Water has apparently agreed to provide water to the KiPower Project, "*the supply clearly falls within the allowable and affordable resource allocation from Rand Water*" with "*sufficient water in the Rand Water system to provide Kuyasa Mining with a daily allocation of 2400m^3 without depriving anyone of drinking water*" (Appeal Response section 34 pages 19 and 20).

121 The KiPower Plant proposes to share the Rand Water supply with its "sister company", Delmas Coal (described as a "*water deficit mine*" "*unlike most other coal mines*"), whilst other supply options are pursued (FEIR pages 75 and 76).

122 Any such written confirmation does not negate the significant water demands of the KiPower Project in an area of pre-existing water scarcity: the FEIR details that, because the supply by Rand Water "*will further constrain the existing Rand Water supply in the region*", Kuyasa "*is pursuing alternative sources of water to supplement the Rand Water*" (page 204).

123 All water sources intended for the Project, whether at present or in the future, would form components of a comprehensive and holistic CCIA. As indicated by the water flow requirements of the Olifants Catchment Classification Notice, the balanced supply of water resources is a relevant factor. An oversupply of water, as might occur upon the Project's discharge of effluent into the surrounding water resources, has potentially significant detrimental effects (see paragraph 113 above).

124 Further, and as set out above, the assessment of mitigation measures purporting to prevent groundwater pollution must account for climate change effects.

125 I note that the WUL for the Project is subject to a separate decision-making process: KiPower was issued with a WUL on 20 February 2017, with I&APs being notified on 31 March 2017. CER, on groundWork's behalf, is currently awaiting a response to its request of 7 April 2017 to the Minister of Water and

Sanitation for written reasons for the decision to issue the WUL, as provided for in terms of section 42(b) of the NWA and section 5(1) of PAJA.

126 I now turn to address certain reviewable errors in the decisions of the Minister and the Chief Director.

THE ABSENCE OF A CLIMATE CHANGE IMPACT ASSESSMENT

127 It was impermissible to grant the Environmental Authorisation in the absence of a CCIA and in circumstances where it would not be possible for the Minister or the Chief Director to withdraw that authorisation if any further assessment, additional information, and public comment warrant that outcome.

The legal effect of the climate change impact assessment

128 Although MacRobert Attorneys has indicated that Kuyasa is in the process of conducting a CCIA, any climate change impact assessment now undertaken can have little, if any, effect on the Environmental Authorisation of the Project, unless a decision-maker considers this assessment following the review and setting aside of the Appeal Decision.

129 Having taken the decision to dismiss the appeal and uphold the Environmental Authorisation, the Minister and the DEA are *functus officio*. Without express powers to withdraw the Environmental Authorisation, they may not do so.

130 Under NEMA and the EIA Regulations, the Minister would have no power to withdraw the Environmental Authorisation if the CCIA and public comments on this assessment warrant that outcome:

130.1 Under sections 31L and 31N of NEMA, provision is only made for the withdrawal of an authorisation if a compliance officer issues a compliance notice for alleged breaches of the law or of conditions attached to the environmental authorisation, a person fails to comply with that notice, and the Minister then takes the decision to revoke the authorisation. The fact that a CCIA may show that the environmental authorisation should not have been granted would not suffice to trigger these powers.

130.2 Under the 2010 EIA Regulations, competent authorities may suspend an authorisation, but they have no powers to withdraw that authorisation. Regulation 47(1) lists the grounds on which a suspension may be based. None of these grounds provide a basis to suspend the environmental authorisation if the CCIA and additional information require that result.

130.3 The 2014 EIA Regulations now give competent authorities express powers to withdraw environmental authorisations, but this power may only be exercised on the following narrow grounds: "*the authorisation was obtained through fraud, non-disclosure of material information or misrepresentation of a material fact*". These grounds would also not apply in this case. In any event, and as explained above, the 2010 EIA Regulations govern this Project.

131 Competent authorities do have the power to amend authorisations that have already been granted, including by the insertion of additional conditions. However, a power of amendment does not suffice in the event that the CCIA shows that the environmental authorisation should not have been granted in the first place.

132 Accordingly, failing the review and setting aside of the Appeal Decision (whether by agreement or otherwise), at this stage, the Minister has no power to reconsider groundWork's appeal in light of an assessment of the Project's climate change impacts.

133 The Minister's unconditional dismissal of groundWork's appeal and upholding of the Environmental Authorisation has also substantially curtailed the public participation process. Public comment on the CCIA will not be able to alter the fact that the Environmental Authorisation has been granted and cannot be revoked. There is little purpose in allowing public comment if it cannot have any possible meaningful effect on the outcome, barring the possibility of piecemeal amendments.

134 We do not know what conclusions will be reached in the CCIA in respect of the KiPower Project because any such assessment process has not yet been concluded. We do not even know if this process has commenced.

135 Nonetheless, in making the decision to uphold the Environmental Authorisation in the absence of this CCIA, the Minister has relinquished any

power to withdraw the Environmental Authorisation if the report and public comment on the report justify that conclusion.

The obligation to conduct a climate change impact assessment

136 In its submissions to the Minister on appeal, groundWork presented extensive information on the need for a CCIA, in light of South Africa's constitutional and statutory obligations, its international commitments, the government's policies, and the scientific evidence.

137 Notwithstanding this information, the Minister concluded that a CCIA was unnecessary, and that there is no legal basis in the EIA framework to inform such assessments.

138 I detail the underlying requirements for a CCIA below in order to demonstrate why it was a fatal error to grant the Environmental Authorisation without first considering a climate change impact assessment.

<u>The threat of climate change and South Africa's response</u>

139 The environmental right enshrined in section 24 of the Bill of Rights of the Constitution of the Republic of South Africa, 1996 (the "**Constitution**") provides as follows:

> *"Everyone has the right –*
>
> *(a) to an environment that is not harmful to their health or well-being; and*

(b) 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."

140 Section 39(2) of the Constitution requires the promotion of the purport, spirit and objects of the Bill of Rights when interpreting legislative provisions.

141 Climate change presents a serious and imminent threat to the environmental right in section 24 of the Constitution.

142 I am advised that this threat is acknowledged by the South African government in its National Climate Change Response White Paper (the **"White Paper"**) 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.*" I attach relevant excerpts from the White Paper, marked **Annexure "SP43"**.

143 The White Paper defines climate change as:

> *"an ongoing trend of changes in the earth's general weather conditions as a result of an average rise in the temperature of the earth's surface often referred to as global warming. This rise in the average global temperature is due, primarily, to the increased concentration of gases known as greenhouse gases (GHGs) in the atmosphere that are emitted by human activities. These gases intensify a natural phenomenon called the "greenhouse effect" by forming an insulating layer in the atmosphere that reduces the amount of the sun's heat that radiates back into space and therefore has the effect of making the earth warmer." (White Paper, page 8)*

144 The government acknowledges that South Africa is extremely vulnerable to the effects of climate change:

> *"Climate change is already a measurable reality and along with other developing countries, South Africa is especially vulnerable to its impacts." (White Paper, page 5)*
>
> ...
>
> *"South Africa is extremely vulnerable and exposed to the impacts of climate change due to our socio-economic and environmental context. Climate variability, including the increased frequency and intensity of extreme weather events, will disproportionately affect the poor. South Africa is already a water-stressed country and we face future drying trends and weather variability with cycles of droughts and sudden excessive rains. We have to urgently strengthen the resilience of our society and economy to such climate change impacts and to develop and implement policies, measures, mechanisms and infrastructure that protect the most vulnerable." (White Paper, page 8)*

145 In particular, water scarcity in South Africa will be aggravated by climate change:

> *"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. Uniquely, South Africa shares four of its major river systems with six neighbouring countries. These four shared catchments amount to approximately 60% of South Africa's surface area and approximately 40% of the average total river flow.*
>
> *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. The water sector must balance the allocation of limited water resources amongst major users (agriculture, domestic urban use and industry), whilst addressing the need to ensure fair access to water for all South Africa's people as well as a sufficient ecological allocation to maintain the integrity of ecosystems and thereby the services they provide." (White Paper page 17)*

146 South Africa's reliance on coal for the generation of electricity makes South Africa a significant global contributor to greenhouse gas emissions. The White Paper acknowledges this fact:

> *"It is acknowledged that Africa, as a whole, has contributed least to GHG concentrations in the atmosphere, but also faces some of the worst consequences and generally has the least capacity to cope with climate change impacts. However, it is also recognised that South Africa is a relatively significant contributor to global climate change with significant GHG emission levels from its energy intensive, fossil-fuel powered economy."*
>
> (Emphasis added). (White Paper page 8)

147 Furthermore, the White Paper recognises that South Africa's reliance on coal for electricity generation is the most significant contributor to its emissions:

> *"South Africa has relatively high emissions for a developing country, measured either per capita or by GHG intensity (emissions per unit of GDP). By any measure, South Africa is a significant emitter of GHGs.*
>
> *The energy intensity of the South African economy, largely due to the significance of mining and minerals processing in the economy and our coal-intensive energy system, has resulted in an emissions profile that differs substantially from that of other developing countries at a similar stage of development as measured by the Human Development Index. Since coal is the most emissions-intensive energy carrier, South Africa's economy is very emissions-intensive ... In 2000, average energy use emissions for developing countries constituted 49% of total emissions, whereas South Africa's energy use emissions constituted just under 80% of total emissions. Even in some fast-developing countries with a similar reliance on coal for energy, energy use emissions are lower than South Africa.*
>
> *In terms of South Africa's latest Greenhouse Gas Inventory (base year 2000),* the majority of South Africa's energy emissions arose from electricity generation, which constituted around half of South Africa's energy emissions and just under 40% of total emissions in 2000."
>
> (Emphasis added). (White Paper page 26)

148 The DEA's Greenhouse Gas Inventory for South Africa 2000 – 2010 notes that the largest source of emissions for the period 2000 – 2010 was electricity generation, which accounted for 55.1% (2 316071 Gg (gigagrams) of carbon dioxide equivalent ("**CO2-eq**")) of total accumulated emissions. I attach the relevant pages of the inventory, marked **Annexure "SP44".**

149 The South African government has committed to a peak in CO2 emissions from 2020 to 2025, with a lower limit of 398 Mt of CO2-eq, and an upper limit of between 583Mt CO2-eq and 614Mt CO2-eq (White Paper page 27).

149.1 Eskom estimates that Medupi and Kusile, when fully operational, will likely, together, add 54.072 Mt of CO2-eq (excluding fuel oil).

149.2 According to the FEIR, the KiPower Project is to contribute approximately 4.2 Mt/annum CO2 emissions over its 30 year design life (i.e. 126 Mt) with no "*economically viable*" mitigation possible (FEIR section 9.2.1.1 page 162).

150 If South Africa is to achieve its national targets to reduce GHG emissions, then future developments of coal-fired power stations, such as the KiPower Project, will require careful assessments of their impact.

151 If South Africa is to properly adapt and ensure that its people and environment are resilient to the impacts of climate change, it is fundamental that the impacts on climate change of proposed large-scale, water and carbon-intensive developments such as coal-fired power stations are properly assessed, and that measures are put in place to minimise and prevent the negative impacts

of such projects on communities, the environment and on the project itself over its anticipated lifespan.

152 As I set out below, South Africa's national targets to reduce GHG emissions are supported by the weight of the country's international commitments and national legislation.

South Africa's international obligations to combat climate change

153 Section 233 of the Constitution requires that all legislation be interpreted in a manner that is consistent with international law, whilst section 39(1)(b) of the Constitution requires the Bill of Rights to be interpreted in a manner consistent with international law.

154 South Africa has signed and ratified the UNFCCC and its Kyoto Protocol - international agreements that seek to address climate change.

155 The White Paper summarises South Africa's obligations under the UNFCCC and Kyoto Protocol as follows:

> *"[i]n terms of the provisions of Articles 4, 5, 6 and 12 of the UNFCCC as well as Article 10 of the Kyoto Protocol, South Africa already has existing international legally binding obligations to:*
>
> *-- Formulate, implement, publish and regularly update policies, measures and programmes to mitigate its emission of GHGs and adapt to the adverse effects of inevitable climate change;*
>
> *-- Monitor and periodically report to the international community the country's GHG inventory; steps taken and envisaged to implement the UNFCCC; and any other information relevant to the achievement of the objective of the UNFCCC, including information relevant for the calculation of global emission trends;*

-- Sustainably manage, conserve and enhance GHG sinks and reservoirs, including terrestrial, coastland marine ecosystems, biomass, forests and oceans;

-- Develop climate change response plans to address integrated coastal zone, water resources, agriculture, and land protection and rehabilitation;

-- Mainstream climate change considerations into social, economic and environmental policy;

-- Promote and cooperate in the development, application, diffusion and transfer of GHG emission mitigation technologies, practices and processes;

-- Further develop and support research and systematic observation organisations, networks and programmes as well as efforts to strengthen systematic observation, research and technical capacities, including promoting research and systematic observation in areas beyond national jurisdiction; and

-- Develop and implement education, training and public awareness programmes on climate change and its effects to promote and facilitate scientific, technical and managerial skills as well as public access to information, public awareness of and participation in addressing climate change."

(White Paper pages 9 – 10) (emphasis added).

156 As a party to the UNFCCC, South Africa participated in the 21st Annual Conference of Parties which resulted in the adoption of the Paris Agreement in December 2015.

157 The Paris Agreement is an international climate change agreement that commits parties to, *inter alia*, limit the global average increase in temperature to "*well below 2°C above pre-industrial levels*" and to "*pursue efforts to limit the temperature rise to 1.5 °C above pre-industrial levels*" (Paris Agreement Article 2(a)).

158 In line with these commitments, the Paris Agreement requires each state party to formulate their goals and objectives in an Intended Nationally Determined

Contribution (now the Nationally Determined Contribution) ("**NDC**"), to report on compliance with their NDC, and to revise their NDC every five years to adopt more stringent targets (Paris Agreement Article 4(9)).

159 South Africa's NDC currently states, *inter alia*, that:

159.1 South Africa is firmly committed to working with others to ensure temperature increases are kept well below 2°C above pre-industrial levels, which could include a further revision of the temperature goal to below 1.5°C in light of emerging science, noting that a global average temperature increase of 2°C translates to an increase of up to 4°C for South Africa by the end of the century (NDC page 1);

159.2 there need to be near zero emissions of CO2 and other long-lived GHGs after 2050 to avoid even greater impacts that are beyond adaptation capability (NDC page 1);

159.3 the timeframes communicated are 2025 to 2030; during this time, South Africa's emissions will be in a range between 398 and 614 Mt CO2–eq, as defined in national policy. This is the benchmark against which the efficacy of mitigation actions will be measured (NDC page 6);

159.4 South Africa's GHG emissions will peak between 2020 and 2025, plateau for approximately a decade, and decline in absolute terms thereafter (NDC page 7); and

159.5 South Africa's NDC was formulated in the context of, *inter alia*, the environmental right set out in section 24 of the Constitution, and its National Development Plan, and the White Paper. The full implementation of these policies and plans will bend the curve of South Africa's GHG emissions towards a peak, plateau and decline trajectory range. At the heart of this transition to a low-carbon energy sector is a complete transformation of the future energy mix (NDC page 2).

(I attach a copy of the relevant excerpts of South Africa's NDC, marked **Annexure "SP45"**.)

160 I am advised that South Africa's NDC is particularly relevant in light of the KiPower Project's projected operation of at least 30 years (FEIR, page 1) from the date of commissioning.

161 On 4 November 2016, the Paris Agreement came into force after attaining the required number of ratifications.

161.1 At least 55 state parties, accounting for over 55% of the total global greenhouse gas emissions, had to ratify the agreement before it could come into force. This threshold was achieved on 5 October 2016 and the agreement entered into force 30 days after this date.

161.2 This happened at an unprecedented and record speed for a multilateral agreement. Currently 157 parties, including South Africa have ratified the Agreement.

162 I am advised that section 231(2) of the Constitution confirms that an international agreement binds the Republic once it has been approved by resolution in both the National Assembly and the National Council of Provinces. South Africa is bound by the provisions of the Paris Agreement because it ratified the agreement on 1 November 2016 (after having signed the agreement in April 2016).

163 Accordingly, the relevant provisions of NEMA and the EIA Regulations on environmental authorisations should be interpreted in a manner that gives expression to South Africa's obligations.

164 I am advised that, at minimum, these obligations require rigorous climate change impact assessments to be conducted before granting environmental authorisation for any new coal-fired power stations. A CCIA is necessary and relevant to ensuring that the proposed coal-fired power station fits South Africa's peak, plateau and decline trajectory as outlined in the NDC - which must be revised every 5 years, with commitments being more stringent than the previous NDC - and its commitment to produce cleaner and more efficient energy sources.

165 This reinforces groundWork's position that a full and rigorous CCIA was required before any decision could be taken to grant the Environmental Authorisation.

The content of a climate change impact assessment of the KiPower Project

166 In light of South Africa's national and international commitments to address climate change and the threat posed by further coal-fired power stations, there is a substantial need to conduct a CCIA for the KiPower Project, and all other coal-fired power stations that are currently in the pipeline for future energy production, prior to the granting of any environmental authorisation.

167 I am advised the CCIA for the KiPower Project should consider the impacts set out below. Because there are no guidelines as to what such an assessment should consider, nor any stipulated requirements from the Minister in her Appeal Decision, international best practice must be used as a guide and benchmark with the assessment to be as accurate and comprehensive an assessment as possible, in order to be of true use and value.

168 First, the assessment must consider how the KiPower Project will impact on climate change, taking into account:

168.1 the direct GHG emissions of the Project (including not only CO_2 but also N_2O (nitrous oxide) and CH_4 (methane) emissions);

168.2 indirect and full life-cycle emissions of the KiPower Project, including emissions from all associated activities such as its construction, the mining of coal (which would include fugitive emissions from coal mines – which have not even been adequately measured yet - and account

for any increased demands on Delmas Coal), the ADF, transport of sorbent and fuel, decommissioning etc;

168.3 the cumulative emissions, taking into account the combined GHG emissions from other coal-fired power stations, mines, heavy industry, and other polluters, and how this will potentially impact on South Africa's emissions targets; and

168.4 an assessment of the social and environmental cost of the GHG emissions, including livelihood, health and safety (I am advised that these are external costs to be factored into the assessment of a project's climate change impacts, or at least into the assessment of the financial feasibility of a project, given the principle in NEMA section 2(4)(p) that the "*polluter*" must "*pay*" for damage or environmental degradation).

169 Second, the assessment must consider how the impacts of the KiPower Project may aggravate the harmful effects of climate change in Mpumalanga, in particular in light of the Project's location outside Delmas within the HPA.

169.1 I am advised that the effects that climate change will have in South Africa include increased water scarcity and increased temperatures for example. These kinds of impacts, which pose significant harm for human health and the environment, will be aggravated by large, water-intensive developments such as the proposed KiPower Project, in particular when located in water stressed areas of significant hydrological sensitivity.

169.2 A report, "The State of Climate Change Science and Technology in South Africa" undertaken by the Academy of Science of South Africa (ASSA) on behalf of the Department of Science and Technology, which has been completed and endorsed by cabinet, highlights the key climate change challenges and impacts in South Africa over the next 30 years – the relevant excerpts are attached marked **Annexure "SP46"**. It states that "*[t]he strongest impacts of climate change in South Africa in the first half of the 21st century will be on the security of freshwater supplies to industry, towns and agriculture; on crop and livestock agriculture, due to less favourable growing conditions; on human health, due to heat stress and disease spread, particularly in urban areas; and on biodiversity, due to shifting habitat suitability.*" (ASSA report page 15)

169.3 As set out above, a proposed industrial power generation project within the HPA must be carefully considered and evaluated in light of its cumulative and singular risk to air quality management in an area in which air quality is of such significant concern.

169.4 South Africa is a water scarce country and climate change will further aggravate this water scarcity. As noted above, Mpumalanga has recently been experiencing significant water shortage challenges and was declared a drought disaster area in 2015.

169.5 DEA's Draft 3rd National Communication to the UNFCCC (referred to above, the relevant excerpts of which are attached as Annexure "SP42",), confirms projected changes in rainfall for the northern interior

(zone 1), which includes the Olifants river. It states that "*projections indicate general drying (but with possible slight wetting) ... this is an area of considerable uncertainty*" (pages 357 – 358).

169.6 The proposed site of the KiPower Project, on the Wilge River which forms part of the Olifants Catchment Water Management Area, spans a stressed catchment which, due to the extent of coal mining and industrial development in the region, has little or no assimilative capacity for additional pollutants (see paragraph 110 above).

169.7 As set out at paragraphs 117 to 119 above, the KiPower Project is to be located in a water stressed area and will require a significant quantity of water in order to operate effectively, it will also pose a substantial pollution threat to water resources in the area. The Project threatens to aggravate the existing significant water impacts, which will potentially have severe effects on people living in the region.

169.8 In any event, the CCIA will need to give careful consideration to, *inter alia*, how the impacts of the Project may further affect the air quality in the HPA and the diminishing water supply in the region.

170 Third, an analysis must also be conducted on how climate change will impact the efficiency and continued operation of the KiPower Project for its anticipated 30 year lifespan. As climate change continues to manifest, increasing water scarcity in the region and rising temperatures have the potential to severely affect the output and efficiency of the Project.

171 Finally, the assessment must propose measures for the avoidance, mitigation or remedy of the Project's climate change impacts including:

171.1 emission management measures and their probable effect;

171.2 the maximum improvement in emissions intensity that could be achieved, and whether this improvement would be a material reduction of GHG emissions; and

171.3 an assessment of the "no go option" (as required in a consideration of alternatives under regulation 31(2)(g) read with regulations 1(1) of the EIA regulations, 2010).

GROUNDS OF REVIEW

172 I now set out the grounds for reviewing and setting aside the decisions by the Chief Director and the Minister to grant the Environmental Authorisation:

172.1 in the absence of the CCIA;

172.2 in reliance on the Project's satisfaction of the IRP requirements;

172.3 stating that there is no legal basis to inform such a CCIA in the EIA framework; and

172.4 taking into account groundWork's opposition to the merits of all coal-fired power stations in South Africa.

173 groundWork relies on both PAJA and the principle of legality in this review application. All of the grounds of review are set out with reference to PAJA.

However, were PAJA for any reason to be held to be inapplicable, all of the grounds of review - save for reasonableness - can be accommodated under the principle of legality.

First ground: Unlawfulness and failure to take into account relevant considerations

174 A full CCIA report for a coal-fired power project that potentially has a significant climate change impact comprises highly material information regarding the Project.

175 In granting and upholding the Environmental Authorisation without considering a CCIA report, the Chief Director and the Minister failed to account for relevant considerations. Therefore, the decision makers could not have had all the information necessary to weigh up climate change considerations against other relevant factors, at the time that the disputed decisions were made.

176 In terms of the peremptory requirements under section 24O(1)(b) of NEMA, a competent authority must make its decision in compliance with NEMA and must:

> *"take into account all relevant factors which may include -*
>
> *(i) any pollution, environmental impacts or environmental degradation likely to be caused if the application is approved or refused;*
>
> *(ii) measures that may be taken –*
>
> *(aa) to protect the environment from harm as a result of the activity which is the subject of the application; and*
>
> *(bb) to prevent, control, abate or mitigate any pollution, substantially detrimental environmental impacts or environmental degradation;*

...

(viii) 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"

177 Regulation 31(2) of the 2010 EIA Regulations sets out the prescribed content for an EIA report, requiring that it "*must contain all information that is necessary for the competent authority to consider the application and to reach a decision*". This must include, *inter alia*:

"(l) an assessment of each identified potentially significant impact, including-

(i) cumulative impacts;

(ii) the nature of the impact;

(iii) the extent and duration of the impact;

(iv) the probability of the impact occurring;

(v) the degree to which the impact can be reversed;

(vi) the degree to which the impact may cause irreplaceable loss of resources; and

(vii) the degree to which the impact can be mitigated".

178 Regulation 31(2) further requires that this information include:

"(d) a description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity

...

(g) a description of potential identified alternatives to the proposed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and the community that may be affected by the activity".

179 In terms of regulation 34(2)(b), the competent authority must reject the environmental impact assessment report if it "*does not substantially comply with the requirements in regulation 31(2)*".

180 Kuyasa's "*ex post facto*" commitment to undertake a CCIA only underscores that such an assessment is relevant and necessary in order to properly consider the environmental impact of the Project. However, as set out above, Kuyasa's commitment to undertake a CCIA pursuant to the Appeal Decision is ineffective because:

180.1 it was necessary for the Chief Director and the Minister to consider the climate change impacts as a relevant factor before making a decision on the Environmental Authorisation, in accordance with NEMA section 24O(1)(b)(i);

180.2 it was necessary for the Chief Director and the Minister to consider any emission reduction measures in mitigation of the Project's anticipated climate change impacts as a relevant factor before making a decision on the Environmental Authorisation, in accordance with NEMA section 24O(1)(b)(ii); and

180.3 the failure to consider the above was also a departure from NEMA section 24O (1)(b)(viii), as the Chief Director and the Minister did not give full consideration to the National Climate Change Response Policy embodied in the White Paper, or to South Africa's obligations in terms of its NDC under the Paris Agreement.

181 Furthermore, the FEIR was substantially non-compliant in terms of regulation 31(2) and ought to have been rejected as it did not contain "*all information that is necessary for the competent authority to consider the application and to reach a decision*", in particular, the identified impacts, environmental description, and potential identified alternatives of a CCIA report.

182 In the circumstances, the decisions stand to be reviewed and set aside:

182.1 On the basis of section 6(2)(f)(i) of PAJA and the principle of legality, in that the decisions contravened a law and were not authorised by the empowering provisions; and

182.2 On the basis of section 6(2)(e)(iii) of PAJA and the principle of legality, because the Chief Director and the Minister took their decisions because relevant considerations were not considered by them. This meant that these decision makers were unable to weigh the impacts of the KiPower Project adequately, because key pieces of information were not included in their consideration.

Second ground: Taking account of irrelevant considerations

183 The Minister's decision was taken due to a consideration of an irrelevant consideration – namely groundWork's apparent intimation that all coal-fired power stations be refused due to their global contribution to CO2 emissions.

184 In this regard:

184.1 groundWork's position in relation to all coal-fired power stations in South Africa is irrelevant;

184.2 neither groundWork's appeal nor this application concern the merits of all coal-fired power stations in South Africa; and

184.3 this application is about the requirements that the KiPower Project must satisfy in order to be granted environmental authorisation under NEMA and the 2010 EIA Regulations.

185 In addition, the Minister's proposal of carbon tax as an emission reduction measure is irrelevant to the consideration of the Project's climate change impacts prior to its environmental authorisation: A carbon tax cannot be regarded as an emission reduction measure for a specific project nor can it address/mitigate the broader climate change impacts of a project.

186 The Minister's reliance on these irrelevant considerations is further reason for the Appeal Decision to be reviewed and set aside in terms of section 6(2)(e)(iii) of PAJA and the principle of legality.

Third ground: Irrational and Unreasonable

187 The decisions taken by the Chief Director and the Minister were also irrational and unreasonable.

Absence of climate change impact assessment

188 The Chief Director ignored the need for a CCIA entirely. As set out above, none of the conditions to the Environmental Authorisation entailed climate change impacts. The Chief Director found that the impact assessment procedure was "*adequate for the decision-making process*" (section 2(c) page 26 of the Environmental Authorisation) and that "*[t]he proposed mitigation of impacts identified and assessed adequately curtails the identified potential impacts*" (section 2(d) page 26 of the Environmental Authorisation).

189 The above findings were irrational in light of: the information in the FEIR regarding the significance of the Project's CO2 emissions (paragraph 89 above); and groundWork's submissions during the commentary process on the need for a CCIA.

190 In the Appeal Decision, the Minister specifically found there was no legal basis to inform a CCIA within the EIA framework.

191 Further, the Minister proposed developing emission reduction measures to be implemented upon their promulgation (Appeal Decision section 5.3 page 19) and emission reduction measures to be implemented upon the Project attaining preferred bidder status in the Coal Baseload IPP Procurement Programme (Appeal Decision section 5.3 page 18).

192 The above findings in the Appeal Decision were irrational in light of: groundWork's submissions regarding South Africa's national and international

obligations in respect of climate change and the potential climate change impacts of the KiPower Project; the FEIR's record of the Project's significant CO2 emissions; and the inherently open-ended and context specific nature of an EIA.

193 The Minister's proposed (and contingent) emission reduction measures bear no rational connection to the consideration of the Project's climate change impacts prior to its environmental authorisation and contravene the risk-averse and cautious approach to environmental authorisations required in terms of the section 2 NEMA principles. Further, and as set out above, a carbon tax cannot be regarded as an emission reduction measure for a specific project nor can it address/mitigate the broader climate change impacts of a project.

194 The irrationality and unreasonableness of granting the Project the Environmental Authorisation are highlighted by Kuyasa's subsequent commitment to undertake a CCIA. If this CCIA was considered to be relevant and necessary, then there can be no rational reason for granting the environmental authorisation without first having sight of this climate change impact assessment report.

Need and desirability

195 Both the Chief Director and the Minister rely on the KiPower Project being required to address the security of electricity supply and to provide the required capacity under the IRP, as reasons for its need and desirability in satisfaction of the requirements of the IRP and the determinations in respect thereof.

196 Regulation 8 of the 2010 EIA Regulations requires that the competent authority has regard for sections 24O and 24(4) of NEMA as well as "*the need and desirability of the activity*". This requirement is detailed at page 11 of the DEA's Guideline on Need and Desirability (GN 891 of 20 October 2014) as follows:

> *"...the "need and desirability" will be determined by considering the broader community's needs and interests as reflected in an IDP, SDF and EMF for the area, and as determined by the EIA. While the importance of job creation and economic growth for South Africa cannot be denied, the Constitution calls for justifiable economic development. The specific needs of the broader community must therefore be considered together with the opportunity costs and distributional consequences in order to determine whether or not the development will result in the securing of ecological sustainable development and the promotion of justifiable social and economic development - in other words to ensure that the development will be socially, economically and environmentally sustainable."*

197 It is by no means certain that Kuyasa/KiPower will be selected as a preferred bidder in respect of the KiPower Project in any subsequent window of the Coal Baseload IPP Procurement Programme.

198 In light of the uncertainty of the role the Project is to play in the production and supply of power, its operation in compliance and satisfaction of the IRP requirements cannot be assumed: Any conclusion of the need and desirability on this basis is preliminary and fatally flawed.

199 Accordingly, the Environmental Authorisation and Appeal Decision stand to be reviewed and set aside in terms of:

199.1 section 6(2)(f)(ii)(aa) and (bb) of PAJA and the principle of legality, as these decisions were not rationally connected to the purpose for which they were taken and the purpose of the empowering provisions;

199.2 section 6(2)(f)(ii)(cc) of PAJA and the principle of legality, as these decisions were not rationally connected to the information before the decision-makers;

199.3 section 6(2) (h) of PAJA, as the decisions were unreasonable.

Fourth ground: Material error of law

200 The Minister's decision on appeal also appears to be tainted by an error of law. As set out above, the Minister's decision to uphold the Environmental Authorisation, despite the absence of the CCIA, is based on her finding that there is no legal basis to inform a CCIA within the EIA framework.

201 Had the Minister considered the role of a CCIA within the EIA framework with a proper understanding of the requirement in NEMA section 24O(1)(b), read with regulation 31(2) of the 2010 EIA Regulations, to identify relevant impacts and mitigation measures and consider relevant policy and information in deciding whether or not to grant an environmental authorisation, as well as South Africa's international and domestic policy commitments to address climate change, she would not have dismissed the Appeal and upheld the Environmental Authorisation.

202 Accordingly, the Minister's decision stands to be reviewed and set aside in terms of section 6(2)(d) of PAJA and the principle of legality, as her decision was materially influenced by an error of law.

REMEDY

203 For these reasons, I pray that:

203.1 the Environmental Authorisation and Appeal Decision be reviewed and set aside; and

203.2 the matter be remitted for reconsideration by the Chief Director, with appropriate directions, including the undertaking of a CCIA, public comment on this assessment, and any further information that the Chief Director may require to reach a decision.

204 Alternatively, I pray that:

204.1 the Appeal Decision be reviewed and set aside; and

204.2 the matter be remitted for reconsideration by the Minister, with appropriate directions, including the undertaking of a CCIA, public comment on this assessment, and any further information that the Minister may require to reach a decision.

205 Further, and insofar as may be necessary, I pray that the period of 180 days referred to in section 7(1) of PAJA is extended to the date of the launch of this application.

CONCLUSION

206 For these reasons, I submit that I have made out a case for the relief which I seek and pray for an order in terms of the Notice of Motion.

207 groundWork is instituting these proceedings out of a concern for the public interest and in the interest of protecting the environment. groundWork has at all times, acted reasonably and has made due efforts to use other means reasonably available for obtaining the relief sought. Accordingly, in terms of section 32(2) of NEMA, groundWork should not be held liable for any costs arising from this application.

SVEN EATON PATRICK PEEK

I hereby certify that the deponent knows and understands the contents of this affidavit and that it is to the best of the deponent's knowledge both true and correct. This affidavit was signed and sworn to before me at Pietermaritzburg on this the 3rd day of AUGUST 2017, and that the Regulations contained in Government Notice R.1258 of 21 July 1972, as amended by R1648 of 19 August 1977, and as further amended by R1428 of 11 July 1989, having been complied with.

SUMEN NAIDOO
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VICTORIA COUNTRY CLUB ESTATE
170 PETER BROWN DRIVE
PIETERMARITZBURG, 3201
SAICA: 30675305
03/08/2017

COMMISSIONER OF OATHS
Full names:
Address:
Capacity: