



# Centre for Environmental Rights

Advancing Environmental Rights in South Africa

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Our ref: CER/RH  
Date: 12 February 2014

Dear Ms Dhemba

## **SUBMISSIONS ON ESKOM'S VARIATION APPLICATIONS FOR ARNOT, CAMDEN, DUVHA, GROOTVLEI, HENDRINA, KENDAL, KOMATI, KRIEL, LETHABO, MAJUBA, MATIMBA, MATLA, MEDUPI AND TUTUKA POWER STATIONS**

1. We make these submissions on behalf of our clients groundWork, Earthlife Africa Johannesburg (ELA), the Vaal Environmental Justice Alliance, and the following community groups: Middelburg Environmental Justice Network; Greater Middelburg Residents' Association; Guqa Community Service Centre; Southern Africa Green Revolutionary Council; Greater Delmas Civic Movement; Highveld Environmental Justice Network; Wonderfontein Resettlement Forum; Mpumalanga Youth Against Climate Change; Outrageous Courage Youth and Schoongesicht Community Movement. Our clients are interested and affected parties in Eskom's applications for variation of its atmospheric emission licences (AELs) and for postponement from the compliance time-frames for the minimum standards (MES) published in terms of section 21 of the National Environmental Management: Air Quality Act, 2004 (AQA).
2. These submissions relate specifically to the variation applications, but these are linked to Eskom's postponement applications. In fact, and as set out below, Eskom specifically relies on the same supporting documents in relation to both sets of applications. On 12 February 2014, we submitted the attached submissions on Eskom's postponement applications (marked **Annexure A**) to Iliso, Eskom's consultants in this process.

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3. As elaborated upon below, neither our clients nor other interested and affected parties were provided with a reasonable opportunity to comment on all of the applications and supporting documents. As a result, we have provided a single set of brief submissions in relation to all of the variation applications.<sup>1</sup> It is also submitted that these variation applications are premature.

4. In the circumstances, and for the reasons set out below and in **Annexure A**, the variation applications should fail.

## 5. The variation applications are premature

5.1. Each variation application states that it is “materially linked” to the postponement application for that station *“in that the rationale for the variation of future emission limits in the [Atmospheric Pollution Prevention Act 45 of 1965 (APPA) registration certificate/AEL] and the rationale for the Postponement are substantially the same. Accordingly, and in order to facilitate clear communication to stakeholders and in pursuance of the objectives of cooperative governance and integrated decision making reflected in, amongst others, the National Environmental Management Act, 107 of 1998, this Variation Application and the Postponement Application, are supported by the same motivational documentation.”*

5.2. The variation applications are dated 20 December 2013, and provide that: *“in terms of Paragraph (13) of the New Regulations, the [National Air Quality Officer (NAQO)] is required to obtain the concurrence of the [relevant licensing authority] before granting the Postponement Application. As such, we assume that the official process of consultation and cooperative decision making between the [relevant licensing authority] and the NAQO is either underway or imminent.”* However, we understand from Eskom that none of the postponement or variation applications has been submitted.

5.3. In any event, and given that the two sets of applications are “materially linked”, it is not understood on what basis Eskom can apply for variation of its AELs or APPA certificates, unless and until its postponement applications are successfully granted. It was, our clients submit, premature to apply for these variations.

5.4. In any event, in at least 7 cases (8 if Medupi is operational before April 2015), Eskom seeks to increase the emission limits in its AELs/APPA certificates even before April 2015 (when the MES apply). Apart from simply making the allegation in its variation applications that *“it is our considered view that the supporting documentation clearly indicates that the approval of this Application will not only be reasonable, but that it will also stand in the national interest”*, Eskom fails to demonstrate why these variation applications should succeed. It is submitted that they should not. This is addressed in more detail below.

## 6. No reasonable opportunity to comment

6.1. As we recorded in **Annexure A**, the period provided for comment on all of the postponement and variation applications and supporting documents was wholly inadequate. Our clients are entitled to administrative action that is lawful, reasonable and procedurally fair<sup>2</sup> and the Promotion of Administrative Justice Act 3 of 2000 (PAJA) was enacted to give effect to this right. Procedurally fair administrative action requires, amongst other things, that our clients be given adequate notice of the nature and purpose of the proposed administrative action and a reasonable opportunity to make representations.<sup>3</sup> They were not.

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<sup>1</sup> Nkangala District Municipality is the licensing authority and must decide the variation applications for the following stations: Arnot; Duvha; Hendrina; Kendal; Komati; Kriel; and Matla. Gert Sibande is the licensing authority and must decide the variation applications for the following stations: Camden; Grootvlei; Majuba; and Tutuka. Fezile Dabi is the licensing authority and must decide the variation application for Lethabo power station. The Limpopo Department of Economic Development, Environment and Tourism is the licensing authority for the following power stations: Matimba; and Medupi.

<sup>2</sup> S. 33 of the Constitution of the Republic of South Africa, 1996.

<sup>3</sup> S.3 PAJA.

6.2. In relation specifically to variation of AELs, AQA provides that, in circumstances where a licence-holder requests a variation of its AEL: “the licensing authority must require the holder of the licence to take appropriate steps to bring the request to the attention of relevant organs of state, interested persons and the public if— (a) the variation of the licence will authorise an increase in the environmental impact regulated by the licence; (b) the variation of the licence will authorise an increase in atmospheric emissions; and (c) the proposed variation has not, for any reason, been the subject of an authorisation in terms of any other legislation and public consultation”.<sup>4</sup> These steps “must include the publication of a notice in at least two newspapers circulating in the area in which the listed activity authorised by the licence is, or will be, carried out—(a) describing the nature and purpose of the request; (b) giving particulars of the listed activity, including the place where it is or will be carried out; (c) stating a reasonable period within which written representations on or objections to the request may be submitted, and the address or place where representations or objections must be submitted; and (d) containing such other particulars as the licensing authority may require”<sup>5</sup> (our emphasis).

6.3. On 6 January 2014, the comment period in relation to 16 postponement applications and 16 variation applications, with numerous supporting documents, began to run, with comment required by 12 February 2014. In other words, Eskom provided just over 5 weeks for comments on extremely technical documents, which require detailed consideration both from a legal and a scientific perspective. Whilst a 5 week comment period may have been reasonable in relation to a single variation application, this is clearly not the case when there are 32 applications and numerous supporting documents for comment. Eskom provided 16 postponement applications, 16 atmospheric impact reports, 16 variation applications, 13 fugitive emission management plans, 14 general information documents and 4 other supporting reports - all for comment within 37 calendar days. Two summary documents were also prepared. In total, 81 documents were made available, with comment due within just over 5 weeks. The Centre and its clients are all non-profit organisations and community organisations, with significant resource constraints and numerous demands on their time. It is reiterated that the time period provided for comment is wholly inadequate. It has significantly prejudiced our clients’ ability to respond to these applications. Our clients record their objections and reserve their rights in this regard.

## 7. The variation applications

7.1. As set out above, in addition to requesting the relevant licensing authorities to vary their AELs/APPA certificates to reflect the postponements (if granted), Eskom has sought the immediate variation of emission limits – to allow increased emissions - in at least the following cases:

7.1.1. Kriel’s AEL provides that the standards currently applicable are: particulate matter (PM) - 125mg/Nm<sup>3</sup>, sulphur dioxide (SO<sub>2</sub>) - 4000 and nitrogen oxides (NO<sub>x</sub>) - 1700, but Eskom seeks to vary this to increase PM to 350 immediately and until 1 April 2020. From now until 1 April 2015, Eskom requests that this limit may be exceeded for 20% of the days in the year, managed cumulatively on a station basis. Eskom seeks to vary SO<sub>2</sub> to 2800 immediately and until decommissioning and No<sub>x</sub> to 1600 immediately and until decommissioning. This application was made to Nkangala District Municipality, and is different from the variation application made by Eskom to Nkangala District Municipality last year, in which Eskom sought to vary its PM limit to increase it immediately and until 31 March 2025 to 400 (ie 50 mg/Nm<sup>3</sup> more and for 5 more years than it seeks in the current application) (and from 1 April 2025 to 50), with the emission limit not to apply to each stack for up to 37 days per year. No explanation has been provided for this inconsistency. The latter application was opposed by our clients and its outcome is awaited.

7.1.2. Grootvlei’s registration certificate provides that the PM standard currently applicable is 100 (which may be exceeded for 90 hours per stack per month) with 200 as a cap limit, but Eskom seeks to vary this to increase it immediately and until 1 April 2018 to 350 for stack 1 and 300 for stack 2 (with both limits to

<sup>4</sup> S.46(3).

<sup>5</sup> S.46(4).

be exceeded for 20% of the days in a year). This application has been made to Gert Sibande District Municipality;

- 7.1.3. Kendal's registration certificate provides that the PM standard currently applicable is 75 (which may be exceeded for 90 hours per stack per month) with 150 as a cap limit, and Eskom seeks to vary this to increase it immediately (and until decommissioning) to 100 (with this limit to be exceeded for 20% of the days in a year until 1 April 2015). This application has been made to Nkangala District Municipality;
- 7.1.4. Lethabo's registration certificate provides that the PM standard currently applicable is 75 (which may be exceeded for 90 hours per stack per month) with 300 as a cap limit, and Eskom seeks to vary this to increase it immediately and until 1 April 2015 to 150 (with this limit to be exceeded for 20% of the days in a year until 1 April 2015). This application has been made to Fezile Dabi District Municipality;
- 7.1.5. Matla's AEL provides that the PM standard applicable currently and until 1 April 2015 is 175 (with no grace period), and Eskom seeks to vary this to increase it immediately and until 1 April 2025 to 200 (with this limit to be exceeded for 10% of the days in a year). This application has been made to Nkangala District Municipality;
- 7.1.6. Tutuka's registration certificate provides that the PM standard currently applicable is 250 (which may be exceeded for 9 days per stack per month) with 300 as a cap limit, but Eskom seeks to vary this to increase it immediately and until 1 April 2024 to 350 (with this limit to be exceeded for 20% of the days in a year until 1 April 2024). This application has been made to Gert Sibande District Municipality;
- 7.1.7. Medupi's AEL provides that the SO<sub>2</sub> standard applicable immediately after commissioning is 500, but Eskom seeks to vary this to increase it from commissioning and until 31 Dec 2026 to 4000 for units 1-6 (with the limits to be exceeded for 10% of the days in a year). This application has been made to Limpopo Department of Economic Development, Environment and Tourism; and
- 7.1.8. Duvha's AEL provides that the PM standard for units 1-3 is 100 and units 4-6 is 200, but Eskom seeks to vary this to increase it immediately and until 1 April 2015 as follows: for units 1-3, to 300 for the duration of on-load rebags and the recommissioning period of the cells after the re-bag; and for units 4-6, to 600 for 37 days per unit per year, managed on a stack basis, in the event of on-line maintenance. Eskom submitted a variation request on 24 January 2014 for comment by 14 February 2014. This application was made separately from the other batch of variation applications and was dubbed an "emergency" request. This, despite the fact that Eskom was aware of this request from at least 13 December 2013 – the date on which it advised the Centre that a variation application would be made "shortly"<sup>6</sup> However, the variation was only received 6 weeks later, with 15 days for comment. The request was addressed to Nkangala Municipality and comments are due on 14 February 2014. We will make such comments directly to Nkangala.

7.2. Eskom relies on the documents supporting the postponement applications also to support its variation applications. For the same reasons as set out in **Annexure A**, our clients oppose these variation applications.

7.3. We draw your attention particularly to the health impacts highlighted in **Annexure A**. Apart from Medupi, the examples in this section all relate to PM. PM affects more people than any other pollutant.<sup>7</sup> Suspended particulate pollutants can travel long distances. PM<sub>10</sub> can reach the upper part of the lung. Smaller particles

<sup>6</sup> This correspondence is available on request.

<sup>7</sup> 'WHO challenges world to improve air quality' 5 October 2006, available at <http://www.who.int/mediacentre/news/releases/2006/pr52/en/index.html>.

(like PM<sub>2.5</sub> and PM<sub>1.0</sub>) are more dangerous – they penetrate deeper and reach the alveolar region.<sup>8</sup> The World Health Organisation (WHO) has not established acceptable thresholds for PM exposure.<sup>9</sup> PM exposure increases the risk of cardiovascular and respiratory diseases, and lung cancer. Particle pollution can aggravate asthma, and cause coughing, wheezing, and decreased lung function, even in otherwise healthy people. It is estimated that, annually, thousands of elderly people die prematurely from exposure to fine particles.<sup>10</sup> Even in the European Union (EU), PM is the most serious air pollution risk. Decreasing PM levels could extend life expectancy in the EU by about 22 months.<sup>11</sup> In addition, PM has been found to cause negative environmental effects.<sup>12</sup> Given its serious impacts, PM is a cause of substantial national concern.<sup>13</sup> Eskom has acknowledged the serious health impacts of PM, but claims that the impact of power stations in this regard is “negligible at worst”.<sup>14</sup> This is disputed, as appears from **Annexure A** thereto.

8. In the circumstances, it is submitted that Eskom’s variation applications are premature; and that, even if its postponement applications succeed, its AELs/APPA certificates cannot be varied to increase atmospheric emissions before April 2015.
9. Please do not hesitate to contact us, should you have any queries or require further information.
10. We look forward to hearing from you regarding the processing of these applications.

Yours sincerely

**CENTRE FOR ENVIRONMENTAL RIGHTS**

per:



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<sup>8</sup> [www.epa.gov](http://www.epa.gov); Rene Georgeinna Thomas *An air quality baseline assessment for the Vaal Airshed in South Africa* (unpublished MSc dissertation, University of Pretoria, 2008) 2-2.

<sup>9</sup> WHO Air Quality Guidelines, 2005 at 7, 9; WHO Guidelines for Air Quality, 2000 at s4, s6

<sup>10</sup> WHO Air Quality Guidelines, 2005 at 9; WHO Guidelines for Air Quality, 2000 at s1, s3.1; [www.epa.gov](http://www.epa.gov); Chantelle Kotze ‘Department highlights air quality improvement strategy’ *Engineering News* 11 May 2012, available at <http://www.engineeringnews.co.za/article/the-dea-highlights-air-quality-improvement-strategy-2012-05-11>; Rosana

Norman, Eugene Cairncross, Jongikhaya Witi et al ‘Estimating the burden of disease attributable to urban outdoor air pollution in South Africa in 2000’ (2007) 97 No 7 *SAMJ* at 784.

<sup>11</sup> Barbara Lewis ‘Breathing European air shortens lives: report’ 24 September 2012, available at <http://www.reuters.com/article/2012/09/24/us-eu-air-idUSBRE88N08V20120924>

<sup>12</sup> [www.epa.gov](http://www.epa.gov); Rene Georgeinna Thomas *An air quality baseline assessment for the Vaal Airshed in South Africa* (unpublished MSc dissertation, University of Pretoria, 2008) 2-2.

<sup>13</sup> 2012 SA Environment Outlook Report draft 2 chap 5 at s4.1.1.

<sup>14</sup> Eskom’s Summary AIR document at pp26-27 (available at: <http://www.iliso.com/2013-12-20/Summary AIR 20 December 2013.pdf>)