

Doubling of SO₂ emissions contested

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Picture: Gulshan Khan/The New York Times.

South Africa's air pollution standards are already "lax" and expose people in many parts of the country to its severe impacts.

And allowing major industrial polluters, such as Eskom and Sasol, to double their harmful sulphur dioxide (SO₂) pollution, will only "exacerbate the already dire situation" and amplify existing violations of Section 24 of the Constitution.

This is the argument put forward by environmental justice group groundWork, which has hauled Minister of Environmental Affairs Nomvula Mokonyane and President Cyril Ramaphosa to court for weakening standards for the notorious pollutant without consultation. Sulphur dioxide is harmful to human health and well-being and causes severe environmental damage, including acid rain, says director Bobby Peek.

In October, then-acting environmental affairs minister Derek Hanekom doubled the SO₂ standards - from 500mg per normal cubic meter to 1000mg/Nm³ - as an amendment to the country's minimum emission standards (MES) without first publishing the proposed doubling of the SO₂ standard for comment, as law requires.

“The weakening of the standards gazetted by the minister would allow all coal-fired boilers to emit double their previously-allowed SO₂ pollution from April 1, 2020,” says its attorneys, the Centre for Environmental Rights (CER).

“This includes the already heavily-polluted Vaal, Highveld and Waterberg Priority Areas, where coal pollution kills thousands of people every year.

“Had these proposed amendments been published for comment, groundWork and other NGOs would have strenuously objected to weakening the SO₂ MES.”

Although other proposed changes to the relevant law were made available for comment last May, there was no indication that any changes were being considered in relation to the MES for coal-fired boilers. In establishing the MES, Peek notes in his founding affidavit, the minister recognised that SO₂ emissions have a “significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage”.

The doubling of the “new plant” SO₂ MES means South Africa lags even further behind emission standards, adopted by other developing countries, making them 28 times weaker than the equivalent standards in China and 10 times weaker than India’s.

The impugned amendment applies to around 25 large coal-burning installations, including Eskom’s fleet, Sasol’s coal boilers, Kelvin power station and various coal-fired boilers at other facilities such as Mondi and Sappi.

“Since November 2018, groundWork and its legal representatives have made repeated efforts to engage with the minister and the department to secure the withdrawal of the impugned amendment to allow for proper notice and comment,” said Peek.

“Officials have repeatedly promised to bring the matter to the attention of the minister and to arrange meetings with the minister, but have failed to provide any substantive response.”

Air pollution is the world’s largest environmental health threat, with severe impacts on human health and well-being, he writes. In correspondence with the National Air Quality Officer, Dr Thuli Khumalo, Robyn Hugo, the head of the CER’s pollution and climate change unit, Khumalo revealed how the “special arrangement” is applicable to all existing plants.

“This opens up scope for more technological options to be used in the republic for SO₂ abatement. It is beneficial to manage overall environment impact as opposed to shifting a problem from one environmental media to another as it could be the case with some technologies”.

Hugo, however, pointed out the amendment was not in the draft which was available for comment. The CER says that if the court agrees with groundWork, big SO₂ emitters like Eskom and Sasol will have to act immediately to reduce their pollution “and so reduce their impact on people’s health and well-being”.

“This will require significant capital expenditure - which industries want to avoid - or they could face both criminal and civil action for violating the law.

For the past six years, groundWork and its partners in the Life After Coal Campaign, the CER, and Earthlife Africa have been opposing efforts by industry, in particular the two biggest polluters, Eskom and Sasol - to “delay and evade” meeting more stringent air pollution standards.

“In fact, when the MES were first promulgated, despite their active participation in the multi-year process to set them, both Eskom and Sasol sought to be completely exempt from the MES.

Subsequent to that failed attempt, both have brought multiple applications - the majority of which have succeeded - to delay compliance with the MES.”

Mokonyane has indicated her intention to oppose groundWork’s court application.

Deleterious effects of sulphur dioxide

Sulphur dioxide (SO₂) is a notorious pollutant that causes significant harm to human health and to the environment.

“It can affect the respiratory system and the functions of the lungs and causes irritation of the eyes,” said Bobby Peek of groundWork.

“Inflammation of the respiratory tract causes coughing, mucus secretion, aggravation of asthma and chronic bronchitis, and makes people more prone to infections of the tract.”

“Studies have linked SO₂ to low birth weight in infants and an increased risk for gestational diabetes mellitus, stillbirths, and pre-term births.”

Hospital admissions for cardiac disease and mortality increase on days with higher SO₂ levels.

“When SO₂ combines with water, it forms sulphuric acid, the main component of acid rain.”

What is adaptation?

The process of adjustment to the actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm, or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to the expected climate and its effects.

Low mitigation outlook

Under a low mitigation scenario, temperatures will increase “drastically” from the 2080-2099 period with increases greater than 4°C across South Africa and increases greater than 6°C possible in the western, central and northern interior, increasing the number of heatwave days and very hot days.

Under a high mitigation scenario, temperatures in the interior could be constrained between 2.5°C to 4°C, according to the draft document.

[The Saturday Star](https://www.iol.co.za/saturday-star/doubling-of-so2-emissions-contested-23672246)

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