

SA withdraws doubling of SO₂

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Picture: Gulshan Khan/The New York Times.

Outgoing Environmental Affairs Minister Nomvula Mokonyane has withdrawn illegally doubled harmful sulphur dioxide (SO₂) pollution standards until her department has allowed for legally proscribed public consultation.

Mokonyane, who was hauled to court by groundWork, an environmental justice group, earlier this month said she withdrew the special arrangement because of objections and complaints her department received “in respect of perceived inadequate public consultation” and would now consult members of the public.

The doubling of the SO₂ standards - from 500 mg/Nm³ to 1000 mg/Nm³ - was introduced by the Department of Environmental Affairs as an amendment to the Minimum Emission Standards (MES) in October by then acting minister Derek Hanekom, without first publishing the proposed doubling of the SO₂ standard for comment as the Air Quality Act requires.

“In an attempt to remedy this failure, the minister has now published a second notice, in which she invites 30 days’ public comment on the same proposed amendment to the MES, which would allow all coal-fired boilers to emit double their previously-allowed SO₂ pollution from April 1 next year,” said groundWork’s attorneys, the Centre for Environmental Rights (CER), which described the temporary withdrawal as a victory.

Eskom and Sasol are South Africa’s biggest emitters of SO₂, a dangerous pollutant that causes significant harm to human health and the environment.

“While we’re relieved that the minister has finally withdrawn the illegal provision to double SO₂ pollution, groundWork and other community organisations will not only continue to oppose this proposed doubling, but will fight all efforts to weaken our already poor pollution standards”, said Bobby Peek, groundWork’s director.

Industries, he said, continued to place profit over people, “disregarding and minimising the impacts their pollution has on communities’ health and well-being”.

Robyn Hugo, the head of the pollution and climate change programme at the CER, said: “South African law should be following the global trend of reducing pollution from industrial facilities as a matter of urgency.

“Instead, we are demonstrating less commitment to clean air and human health than other developing countries.”

Mokonyane said the intention of the amendment was to provide for existing coal-fired plants to comply with a SO₂ minimum emission limit of 1000mg/Nm³ instead of 500mg/Nm³.

“This means that existing plants would reduce emissions from the current standard of 3500mg/Nm³ to 1000mg/Nm³. This is a significant reduction and would still lead to improvements in ambient air quality as total SO₂ emissions would be reduced by at least 50%.

“Currently, the State of Air Report over the years shows compliances with the SO₂ annual ambient air quality standard but the government continues to regulate it because of its contribution to secondary pollution.”

Achievement of the new plant standard of 500mg/Nm³ for SO₂ required the installation of limestone-based wet Flue Gas Desulphurisation (FGD), which is the biggest cost driver in pollution abatement technology.

“This technology has the SO₂ removal efficiency of over 95%.

“Although FGD is efficient, there are challenges associated with it.

“The typical capital cost for a 4000MW power plant is R13billion with an additional R3bn operating cost per annum.

“These costs are very high for a slow growing fossil-fuel based economy.” FGD installation required additional water resources and mining of new limestone as input material but South Africa’s water resources were already constrained.

Limestone would have to be mined because FGD used good-quality limestone to absorb SO₂ from the flue gas thus forming gypsum.

“The current market would not be able to absorb the gypsum that would be generated as such it would need to be disposed.

“The amount and quality of limestone needed is not readily available.

“This means that new mines would be required and mining presents additional environmental problems.

“In addition, good-quality limestone mines are located in the Northern Cape, which is a considerable distance from the existing major sources of SO₂ and transportation would add to greenhouse gas emissions, among others. Revision of the new plant standard for the existing plants from

500mg/Nm³ to 1000mg/Nm³ opens up the scope for other technologies to be used in the abatement of SO₂ pollution and would not lead to as much carbon emissions,” Mokonyane said.

Yesterday, Greenpeace Africa said the withdrawal of the unlawfully weakened SO₂ limits was undoubtedly a “wise move” to be celebrated.

“However, civil society organisations should not have had to take the department to court for that to have happened. The department needs to show South Africans that it is progressive enough to take bold action at all levels, instead of defending polluters and weakening legislation to accommodate them, when they are pushing us closer to a full-blown climate crisis.”

Last week, a global review, published in the journal, *Chest*, found that air pollution may be damaging every organ and almost every cell in the human body.

“Air pollution can harm acutely, usually manifested by respiratory or cardiac symptoms, as well as chronically, potentially affecting every organ in the body. It can cause, complicate, or exacerbate many adverse health conditions.

“Tissue damage may result directly from pollutant toxicity because fine and ultra-fine particles can gain access to organs, or indirectly through systemic inflammatory processes.”

Send your comments on the proposed amendments to omatshediso@environment.gov.za.

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