

■ POLLUTION

'Deadly Air' case cites particulates

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FINE particulate air pollution – tiny particles of soot, black carbon, sulphates, nitrates and heavy metals that are breathed into the lungs and pass into the bloodstream – is the single largest environmental risk to human health, says the UN special rapporteur on human rights and environment.

David Boyd has filed his application in the North Gauteng High Court to be admitted as a friend of the court in the landmark Deadly Air litigation brought by environmental justice group groundWork and community organisation Vukani Environmental Movement, demanding that the government clean up the air in the Mpumalanga Highveld.

Leading global research on the burden of disease shows that in 2017 there were 19 410 deaths in SA attributable to ambient or outdoor air pollution, including 18 300 deaths caused by fine particulate matter and 1 110 deaths caused by ambient ozone pollution, says Boyd, an associate professor of law, policy, and sustainability at the University of British Columbia, in his affidavit.

His role as special rapporteur is to advocate for the protection of human rights from environmental harm, including air pollution.

"Air pollution is the deadliest environmental problem in the world today, causing millions of deaths annually,



The Matla Power Station in Mpumalanga | DUMISANI SIBEKO

yet it is also a problem amenable to well-known solutions. The long-standing failure of a government to improve air quality, especially when it has failed to act with the requisite degree of urgency in the face of long-term exceedances of national air quality standards, is a violation of the right to a healthy environment."

This is particularly true when the victims of air pollution are marginalised and vulnerable communities, including children and people living in poverty, he says.

Poor air quality has implications for a wide range of human rights, including the rights to life, health, water, food, housing and adequate standard of living.

"There is a significant body of evidence showing that the burden of poor air quality falls disproportionately on the shoulders of marginalised and vulnerable communities," he adds.

States have clear obligations under international human rights law to protect the enjoyment of human rights from environmental harm.

Boyd notes how the UN Human Rights Committee stated that environmental degradation, climate change and unsustainable development constitute "some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life" in 2018.

He submits that a human rights perspective should serve as a catalyst for accelerated action to achieve clean air, empower those working to improve air quality and guide state actions towards a healthy and sustainable future.

Exposure to air pollution causes a range of devastating health effects, including respiratory illness and infections, heart disease, stroke, lung cancer and negative birth outcomes.

"A growing body of evidence links air pollution to other health problems, including cataracts, ear infection, the onset of asthma in children, chronic deficits in lung function, diabetes, childhood obesity, stunting, developmental delays, reduced intelligence and neurological disorders, affecting both children and adults."

Children are uniquely vulnerable to the adverse impacts of poor air quality due to physiological, behavioural and environmental factors, he says. Air pollution is the leading risk factor for acute lower respiratory tract infections (pneumonia) in children under 5.

"Their developing brains and bodies are exquisitely sensitive to toxic substances and they have longer life expectancy, so childhood exposure can have lifelong health consequences."

On June 29, the court will decide whether to admit Boyd as an amicus curiae or dismiss his application.