International Journal of Law Research, Education and Social Sciences

Open Access Journal – Copyright © 2025 – ISSN 3048-7501 Editor-in-Chief – Prof. (Dr.) Vageshwari Deswal; Publisher – Sakshi Batham



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non-Commercial-Share Alike 4.0 International (CC-BY-NC-SA 4.0) License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium provided the original work is properly cited.

Air Pollution and the Right to Breathe: Legal Approaches to Smog in Delhi and NCR

Gurveen Kaur^a

^aUniversity School of Law and Legal Studies, Guru Gobind Singh Indraprastha University, New Delhi, India

Received 12 September 2025; Accepted 13 October 2025; Published 17 October 2025

Delhi-NCR's winter smog is among the world's worst, violating residents' fundamental right to a clean environment under Article 21 of India's Constitution. This paper examines the legal framework used to combat Delhi's air crisis. It outlines how courts have interpreted Article 21 to include air quality, surveys key statutes: the Air Prevention and Control of Pollution Act 1981, the Environment Protection Act 1986, the NGT Act 2010, and the new CAQM Act 2021, and explains policy instruments like the Graded Response Action Plan (GRAP). It reviews important judicial decisions – by the Supreme Court, NGT and High Courts – specific to Delhi/NCR smog, e.g. NGT's ban on crop-burning, SC/NGT vehicle age bans, and enforcement of GRAP. The roles of the CPCB, DPCC and (formerly) EPCA - now replaced by the Commission for Air Quality Management (CAQM) – are analysed. Persistent enforcement gaps and coordination issues across Delhi, Haryana, Punjab, UP and Rajasthan are highlighted. We discuss the severe health impacts of smog (especially on children, the elderly and outdoor workers) with data from the WHO and epidemiological studies. Finally, we consider citizen action and media attention through PILs, RWAs and social and briefly compare international models like the EU's tightening of PM 2.5 limits and compensation rights, China's law enabling citizen suits and daily fines.

Keywords: air pollution, article 21, environmental law, smog.

INTRODUCTION

Delhi and its surrounding National Capital Region (NCR) suffer extreme winter smog, with PM 2.5 levels routinely dozens of times higher than WHO guidelines. For example, in December and January, the daily AQI often spikes into the "hazardous" category. WHO reports that over 99% of Delhi's residents breathe air above safe limits, contributing to cardiovascular and respiratory morbidity.2 This environmental crisis violates the right to a clean environment inherent in Article 21 ("right to life") of the Indian Constitution.3 In response, India has layered multiple legal approaches - constitutional, statutory, and regulatory - to control smog. Courts have repeatedly held that "without a clean environment...life and liberty" cannot be secured.4 In response, India has layered multiple legal approaches - constitutional, statutory, and regulatory to combat the menace of smog in Delhi-NCR. The constitutional framework, reinforced by judicial interpretation, has been supported by statutory measures such as the Air (Prevention and Control of Pollution) Act 1981,5 the Environment (Protection) Act 1986,6 and policy initiatives like the National Clean Air Programme⁷ (NCAP) and the Graded Response Action Plan (GRAP). Despite these robust legal instruments, persistent smog episodes expose deep implementation and compliance challenges, compounded by inter-state disputes over cropresidue burning and weak regulatory execution. This paper analyses the constitutional guarantees, statutory provisions, judicial interventions, and administrative mechanisms that together shape Delhi's ongoing legal battle against smog, evaluating their effectiveness in securing the citizens' right to breathe clean air.

_

 $^{^{1}\}text{'Ambient (outdoor) air pollution'} (\textit{World Health Organization}, 24 \text{ October 2024}) < \underline{\text{https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health}} > accessed o5 \text{ September 2025}$

² Jeroen de Bont, PhD et al., 'Ambient air pollution and daily mortality in ten cities of India: a causal modelling study' (2024) 8(7) The Lancet Planetary Health https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health accessed 06 September 2025

³ Constitution of India 1950, art 21

⁴ Francis Coralie Mullin v The Administrator, Union Territory of Delhi [1981] 1 SCC 608; Subhash Kumar v State of Bihar AIR 1991 SC 420; Vellore Citizens' Welfare Forum v Union of India (1996) 5 SCC 647

⁵ Air (Prevention and Control of Pollution) Act 1981

⁶ Environment (Protection) Act 1986

⁷ Shri Nikunja K Sundaray and Dr. Shruti Rai Bhardwaj, 'National Clean Air Programme' (*MoEFCC*, 2019)

https://mpcb.gov.in/sites/default/files/air-quality/National Clean Air Programme09122019.pdf accessed 05 September 2025

CONSTITUTIONAL RIGHT TO CLEAN AIR (ARTICLE 21)

The Indian Supreme Court has long interpreted Article 218, the right to life and personal liberty, to include environmental quality. In Francis Coralie Mullin v Union of India (1981)9, the Court explicitly held that the "right to life and personal liberty" includes "the right to health, clean environment, and necessities of life." Thereafter, in M.C. Mehta v Union of India (1987),¹¹⁰ the Court recognised "the right to live in a pollution-free environment," and in Vellore Citizens' Welfare Forum v Union of India (1996),¹¹¹ the Court emphasised "the right to pollute-free water and air." These precedents have made clear that clean air is a constitutional imperative. Even earlier cases like Subhash Kumar v State of Bihar (1991)¹² and Charan Lal Sahu v Union of India (1989)¹³ linked Article 21 to environmental standards, reinforcing that any egregious air pollution may amount to deprivation of the right to life. Most recently, the SC has extended the environmental scope of Article 21¹⁴ to include protection from climate risks. Collectively, these judgments make the "right to breathe" a fundamental right in India.

This constitutional backdrop empowers citizens and courts to demand pollution control as part of fundamental rights enforcement. It also imposes a public trust duty on the State to protect natural resources and prevent degradation (Articles 48A¹⁵, 51A(g)¹⁶ of the Constitution). The result is a heightened legal standard: even where statutory mandates exist, courts will apply Article 21's¹⁷ "strict liability" duty to safeguard air quality.

LEGISLATIVE AND REGULATORY FRAMEWORK

Delhi's air is regulated by a hierarchy of statutes and policies. The Air (Prevention and Control of Pollution) Act, 1981,¹⁸ is the core law for air quality. It establishes the Central and State Pollution Control Boards (CPCB/SPCBs) and empowers them to set emission and ambient standards, issue operation consents, and declare "air pollution control areas" for targeted

⁸ Constitution of India 1950, art 21

⁹ Francis Coralie Mullin v The Administrator, Union Territory of Delhi AIR 1981 SC 746

¹⁰ M C Mehta and Anr v Union of India and Ors AIR 1987 SC 1086

¹¹ Vellore Citizens' Welfare Forum v Union of India and Ors (1996) 5 SCC 647

¹² Subhash Kumar v State of Bihar and Ors AIR 1991 SC 420

 $^{^{13}}$ Charan Lal Sahu and Ors v Union of India and Ors AIR 1990 SC 1480

¹⁴ Constitution of India 1950, art 21

¹⁵ *Ibid* art 48A

¹⁶ *Ibid* art 51A(g)

¹⁷ *Ibid* art 21

¹⁸ Air (Prevention and Control of Pollution) Act 1981

action. The Air Act "lays down a mechanism to monitor pollutants, set standards for emitters, devise plans for clean air and create an enforcement mechanism through the PCBs." For instance, industries and fuel suppliers must obtain consent to operate; citizens can appeal consent decisions to Appellate Authorities. The CPCB under the Act notified National Ambient Air Quality Standards for PM 2.5, PM 10, NOx, SO 2, etc., which serve as binding benchmarks. CPCB and the State Boards can issue directions under Section 31A¹⁹ to enforce these standards. In Delhi, DPCC has used such powers to ban firecrackers and curb wasteburning, and to mandate the implementation of the Graded Response Action Plan (GRAP) during smog episodes.

The Environment (Protection) Act, 1986,²⁰ is an umbrella law under Article 253,²¹ enabling the Union Government to fill regulatory gaps. EPA authorises the central government to prescribe broad environmental quality rules and emergency measures. Many regulations under the EPA (e.g. vehicular emission norms, open burning bans, fuel quality standards) are relevant to air pollution. The 2010 National Green Tribunal Act²² created a specialised tribunal with fast-track authority over environmental cases; it became the primary forum for Delhi smog litigation. In 2020-21, Parliament passed the Commission for Air Quality Management Act, 2020²³ (CAQM Act), to consolidate NCR air governance. This statute disbanded the Supreme Court-mandated EPCA and set up a new Commission for NCR and adjoining areas (Punjab, Haryana, UP, Rajasthan). CAQM's functions include planning pollution control, coordinating actions among states, and issuing binding directions. Notably, it stipulates that in case of conflict, the Commission's orders override those of state governments, CPCB or SPCBs.

Alongside these laws, several policy initiatives play a role. The Graded Response Action Plan (GRAP) (first notified in 2016) is an inter-agency protocol of escalating actions tied to air quality thresholds (e.g. prohibiting construction, school closures, fuel restrictions). It was prepared by CPCB/EPCA and later updated by CAQM. Although not a statute, GRAP has the force of law through directions from courts and authorities (e.g. Section 31A orders). The Union's National Clean Air Programme sets national targets for PM 2.5 reduction and city action plans,

¹⁹ *Ibid* s 31A

²⁰ Environment (Protection) Act 1986

²¹ Constitution of India 1950, art 253

²² National Green Tribunal Act 2010

²³ Commission for Air Quality Management in National Capital Region and Adjoining Areas Act 2021

influencing Delhi's strategies. Finally, the Motor Vehicles Act, 1988²⁴ and its rules govern vehicular emissions (with Bharat Stage fuel norms and vehicle scrappage rules), which, in alignment with Air Act restrictions, have led to bans on older diesel vehicles in NCR. Together, these legal instruments create a comprehensive framework for controlling Delhi's smog.

ROLE OF REGULATORY BODIES

Multiple agencies share Delhi's air-quality mandate. At the centre is the Central Pollution Control Board (CPCB), which advises the government, monitors air data nationally, and issues uniform standards. CPCB also collects and publishes Delhi-NCR pollution data and oversees compliance.²⁵ The Delhi Pollution Control Committee (DPCC) acts like a state PCB for Delhi (constitutionally under Union jurisdiction). DPCC enforces Air Act consents, monitors emissions, and can seek prosecution under the EPA/Air Act. For example, the DPCC in 2021 issued a direction imposing a ban on firecrackers in Delhi to prevent particulate spikes, and it also coordinates GRAP implementation on the ground.²⁶

Until 2020, the Supreme Court had created the Environment Pollution (Prevention & Control) Authority (EPCA)²⁷ to specifically address NCR air. EPCA exercised quasi-statutory powers. With CAQM's enactment in 2020, EPCA was superseded. The Commission for Air Quality Management (CAQM)²⁸ now holds statutory authority over the entire NCR and nearby districts. CAQM's boards include experts, NGOs, and ex officio members (CPCB, ISRO, NITI Aayog, state environment ministers). Its sweeping powers (preparing plans, coordinating states, issuing binding directions) aim to reduce previous fragmentation. In theory, CAQM can order a state government or even CPCB to act, and its sub-committees handle monitoring, enforcement, and research.

At the state level, Punjab, Haryana, Uttarakhand and Rajasthan pollution boards, together with municipal agencies, share responsibility for non-Delhi sources (e.g. crop burning, construction). Courts have repeatedly called for joint committees of CPCB, DPCC and all states to regularly

²⁴ Motor Vehicles Act 1988

²⁵ 'About us' (Central Pollution Control Board) < https://cpcb.nic.in/Introduction/> accessed 09 August 2025

²⁶ 'About Us' (*Delhi Pollution Control Committee*) < https://www.dpcc.delhigovt.nic.in/about#gsc.tab=0> accessed 09 August 2025

²⁷ EPCA (Environment Pollution (Prevention & Control) Authority)

²⁸ CAQM Act 2021

review pollution data and actions (see Vardhaman Kaushik, below). In practice, coordination gaps persist, as discussed later.

JUDICIAL RESPONSES: NGT AND SUPREME COURT ORDERS

Courts have been active in directing smog control measures. The NGT case Vikrant Kumar Tongad v EPA (2015)²⁹ was a landmark in agriculture-smoke control: the Tribunal banned all field stubble-burning across Delhi, Haryana, Punjab, UP and Rajasthan, stating this open burning was a major pollution source. Pollution boards were ordered to enforce the ban and monitor air quality in major cities. This NGT order (2015) effectively prohibited field fires in five states, reflecting the right to breathe as a legal imperative.

Another key NGT matter³⁰ focused on Delhi's emergency response. The applicant argued that existing GRAP measures were inadequate. In December 2017, a three-judge NGT bench noted that 60–87% of winter days in 2015-16 were already "poor" or worse, yet action triggers differed by state. The NGT therefore issued its own preventive Graded Action Plan, more stringent than the government's GRAP. It required states to uniformly categorise pollution levels and promptly implement steps (e.g. deploying water sprinklers, halting waste burning, even odd-even driving in moderate pollution) well before an 'emergency' threshold. Importantly, the NGT directed that all states must register cases against violators under Section 15 of the EPA (which imposes heavy fines). Thus, Kaushik (2017 NGT) stressed the precautionary principle and uniform enforcement

Following Kaushik, in 2021, the same case was revisited³¹. The NGT reiterated that NCR-wide cooperation is critical. In its July 2021 order, the Tribunal directed the states of Delhi, UP, Haryana, Punjab and Rajasthan to each prepare action plans fully compliant with GRAP and earlier Court orders. All boards (DPCC, SPCBs, CPCB) were directed to submit monthly ambient air analyses to the NGT. CPCB was entrusted to oversee compliance, and the NGT emphasised continuing its monitoring committees. The Tribunal concluded that the health of the populace demands coordinated, ongoing action. In other words, the courts have insisted that Delhi's smog cannot be solved by Delhi alone; all neighbouring states and agencies must participate.

²⁹ Vikrant Kumar Tongad v Environment Pollution Authority & Ors (2015) OA No 118/2013

³⁰ Vardhaman Kaushik v Union of India and Ors (2016) OA No 21/2014

 $^{^{31}}$ Ibid

The Supreme Court has also intervened. In M.C. Mehta v Union of India (2018),³² in a key order, the Court upheld the NGT's 2015 ban on diesel vehicles older than 10 years (and petrol vehicles older than 15 years) throughout NCR, making these measures court directions. It mandated the impounding of offenders and directed the Transport Departments of all NCR jurisdictions to publish and enforce the vehicle age restrictions immediately. This SC order exemplifies how Article 21 rights justify strict limits on vehicles and compelled public notices (e.g. CPCB was to post lists of violators online). The Supreme Court also regularly issues oversight orders on pollution: most recently in October 2024, it demanded updates from CAQM and states on stubble-burning control, even reprimanding CAQM for "not making efforts to follow up implementation of its own directions."³³

High courts in Delhi, Punjab and other states have sporadically entertained smog-related writs. For example, citizens filed petitions in the Delhi High Court demanding the enforcement of odd-even schemes or dust control. However, most authoritative smog jurisprudence has come from the NGT and the Supreme Court, given their powers to enforce environmental standards.

In summary, the judiciary in India has consistently treated clean air as a non-negotiable right, issuing directives whenever pollution spikes threaten public health. Many remedies have been structural (banning fuels/vehicles) and procedural (mandating reports, compliance deadlines). These cases underscore that pollution abatement is a legal duty, not a mere policy preference.

ENFORCEMENT, COORDINATION AND ACCOUNTABILITY

Despite robust laws and court orders, enforcement remains challenging. Delhi's pollution stems from multiple sources and jurisdictions, making coordination essential. In practice, neighbouring states have sometimes been slow or uneven in acting on the NGT/SC directions. For example, the NGT in 2017 expressly criticised the lack of "unanimity" in how states categorised pollution levels, noting that each used different cutoff charts for AQI stages. This led the NGT to create its own unified schedule.

 $^{^{32}}$ M C Mehta and Anr v Union of India and Ors AIR 1987 SC 1086

³³ Ainnie Arif, 'India's top court pulls up authorities over air quality as farmers burn crop residue' *Reuters* (03 October 2024) < https://www.reuters.com/world/india/indias-top-court-pulls-up-authorities-over-air-quality-farmers-burn-crop-residue-2024-10-03/ accessed 09 August 2025

A major bottleneck has been crop residue burning in Punjab, Haryana and western UP. Despite the Supreme Court and NGT orders banning stubble fires, enforcement on the ground is sporadic. In October 2024, the SC reprimanded officials for merely collecting nominal compensation from a handful of farmers instead of curbing the practice. Satellite data showed nearly 200 daily fires in early October. The Court directed CAQM and the states to report efforts in one week, signalling judicial impatience with bureaucratic inertia. This episode illustrates the accountability gap: even with strong laws, political and resource constraints can limit actual action.

Another example is urban pollution enforcement. The Supreme Court's diesel ban requires Delhi, Haryana, UP and Rajasthan transport departments to impound old vehicles. But police and transport authorities have at times been lax, leading courts to order publication of violator lists and public notices. Similarly, courts have had to repeatedly press states to control construction dust, vehicular emissions, garbage burning, etc., via Section 15 of the EPA³⁴ prosecutions. In Kaushik (2021 NGT), the Tribunal explicitly ordered states to prosecute violators under EPA Section 15, which carries fines up to ₹1 crore. This was intended to put teeth into enforcement.

The new CAQM was meant to resolve some coordination issues by centralising authority. Its mandate requires monthly compliance reports from states and empowers binding directives. However, even CAQM's effectiveness is under scrutiny. As Reuters (Oct 2024) reported, the Supreme Court noted that CAQM "does not seem to be making any efforts to follow up implementation of its own directions." In other words, a strong legal framework exists, but onthe-ground follow-through is inconsistent.

Institutional accountability has also been uneven. Although CPCB issues directives (e.g. on waste management, vehicle emissions) and DPCC enforces local bans (e.g. cracker bans), there is often little sanction for non-compliance. For instance, CPCB highlighted that Delhi filed zero criminal cases under the Air Act in 2019³⁵ despite extreme pollution. The CPCB's recent role has expanded to include surprise inspections and monitoring, but it largely depends on states to act. The

³⁴ Environment (Protection) Act 1986, s 15

³⁵ Air (Prevention and Control of Pollution) Act 1981

absence of a clear penal enforcement, aside from EPA Section 15³⁶ cases, means violations can persist unless courts intervene.

In summary, the Delhi smog saga exposes classic enforcement failures: jurisdictional friction, resource limitations, and diffused responsibility. Courts compensate with directives, but ideally, a stronger local implementation (fines, incentives, public transparency) is needed. The involvement of community groups is one attempt to fill this gap by demanding accountability from officials.

PUBLIC HEALTH IMPACT

The human toll of Delhi's pollution crisis is dire, lending urgency to the legal fight. Studies consistently link high PM 2.5 and NO 2 levels with increased mortality from heart attacks, strokes, asthma and lung disease. A multi-city Lancet analysis found that Delhi experienced, on average, 12,000 annual deaths attributable to PM 2.5 exposure (2008–2019) – an order of magnitude higher than a city like Shimla in the same period. In 2019, the WHO estimated around 724,000 premature deaths in India due to ambient air pollution, mostly from cardiovascular causes. In fact, 68% of outdoor pollution deaths globally stem from heart disease and stroke, while 14% are from chronic lung disease.

Certain groups are disproportionately affected. Children breathe faster and play outdoors, so they inhale more polluted air per kilogram bodyweight. WHO reports that globally, ~93% of children under 15, including those in India, live in areas with unhealthy air. The health impacts on children include higher rates of pneumonia and bronchitis, impaired lung development, increased asthma, and even cognitive effects. WHO notes that in 2016, about 600,000 children died from acute lower respiratory infections caused by polluted air. In Delhi specifically, paediatricians report that almost all children show elevated inhaled pollutant markers (tarry deposit on lungs), and asthma and school absenteeism spike during smog months.³⁷

³⁶ Environment (Protection) Act 1986, s 15

³⁷ 'More than 90% of the world's children breathe toxic air every day' (*World Health Organization*, 29 October 2018) < https://www.who.int/news/item/29-10-2018-more-than-90-of-the-worlds-children-breathe-toxic-air-every-day accessed 05 September 2025

The elderly and those with chronic illness also bear a heavy burden. Short-term spikes in PM often coincide with days of elevated cardiac arrests and emergency hospitalisations for chronic obstructive pulmonary disease (COPD).

Overall, Delhi's air pollution is a classic environmental justice issue. Poorer neighbourhoods (with stubble-burning winds, industrial pockets, and dirt roads) suffer even worse air, yet lack resources for mitigation (e.g. affordable air purifiers). Children in slums are at acute risk. These health inequities make the legal stakes higher: the state's duty under Article 21³⁸ is most urgent where life, particularly among the vulnerable, is at stake.

INTERNATIONAL COMPARISONS

Delhi's plight is part of a global pattern, and other jurisdictions offer lessons. In the European Union, air quality is regulated by a robust Ambient Air Quality Directive. In late 2024, the EU adopted a revised directive cutting the annual PM 2.5 limit by over 50%, and importantly, granting legal remedies to victims of pollution.³⁹ Under the new EU rules, citizens suffering health damage from contaminated air now have "the right to be compensated" if a member state exceeds limit values. The directive also expands access to justice and mandates stronger air monitoring. This reflects a philosophy akin to India's Article but backed by codified standards and remedy rights.

In China, a serious smog problem triggered sweeping reforms. The revised Air Pollution Prevention and Control Law⁴⁰ (enacted 2016) strengthened enforcement dramatically: it introduced daily fines for violators, banned falsification of emissions data, and, crucially, for the first time allowed citizens' lawsuits for enforcement. China's successive "Action Plans for Clean Air" (2013–17 and 2018–20) set quantitative reduction targets for PM 2.5 in key regions (e.g. Beijing-Tianjin-Hebei) and tightly limited coal use. By 2017, these efforts produced marked PM 2.5 reductions in major cities, though goals were only partially met. The key lesson is China's use of binding coal caps and technology mandates, along with citizen oversight, to force local compliance.

³⁸ Constitution of India 1950, art 21

³⁹ 'Air quality: Council gives final green light to strengthen standards in the EU' (*European Council Council of the European Union*, 14 Oct 2024) https://www.consilium.europa.eu/en/press/press-releases/2024/10/14/air-quality-council-gives-final-green-light-to-strengthen-standards-in-the-eu/ accessed 05 September 2025

⁴⁰ China - Air Pollution Prevention and Control Law 2016) and the Action Plans (2013–17; 2018–20)

Other countries also provide context. Pakistan's Supreme Court has at times treated air pollution as a rights violation. Several South Asian constitutions (Bhutan, Bangladesh) explicitly recognise the right to a healthy environment. The EU experience shows how linking air law with health rights and compensation strengthens accountability. In Delhi's case, some have suggested enshrining the right to clean air explicitly in law (as some states do for water). But whether by constitutional mandate or statute, the comparative approach confirms that Delhi's legal response could be reinforced by clearer enforcement mechanisms and citizen remedy provisions, as seen abroad.

CONCLUSION

The battle against Delhi's smog is ultimately a fight to secure the constitutional right to breathe. Over the past decades, Indian courts have unequivocally treated clean air as part of Article 21, inspiring a comprehensive legal regime: from the Air Act and EPA to specialised bodies like CAQM, guided by court-enforced action plans. Key judgements have curbed old diesel vehicles, banned crop fires, and required inter-state coordination. These measures, together with campaigns by citizens and media, reflect a multi-pronged strategy.

Yet implementation remains inconsistent. Enforcement gaps - whether lax state action on burning fields or delayed closures of polluting units - undermine legal mandates. Recent Supreme Court criticism of CAQM's follow-through and RWAs' calls for accountability underscore that law alone isn't enough without political will. The severe health impacts on children, the elderly and workers demand urgent, sustained action.

For Delhi, the convergence of environmental science and constitutional law means that every breath of polluted air implicates a fundamental right. Strengthening this "right to breathe" in practice may require innovations: for example, clearer penalties (as in China) or compensation rights (as in the EU) for victims of pollution. Meanwhile, continued public vigilance, aided by media and civic groups, will be vital. The legal framework, statutory, judicial and participatory, provides many tools. The challenge is to wield them consistently across borders and bureaucracies, fulfilling the promise of Article 2141 that no citizen of Delhi needs "travel closer to ill-health by each breath that they take."

⁴¹ Constitution of India 1950, art 21