

April 28, 2025

Illinois Pollution Control Board 60 E. Van Buren St., Suite 630 Chicago, IL 60605

Re: Case # R24-17 In the Matter of Proposed Clean Car and Truck Standards: Proposed Section 35 III. Admin Code 242

Chairperson and Members of the Board,

On behalf of the Environmental Law and Policy Center, we write to urge the Illinois Pollution Control Board to adopt the Advanced Clean Trucks (ACT) Rule in order to protect the health of Illinois residents by reducing their exposure to air pollution from buses and trucks, while giving manufacturers flexibility in compliance.

Vehicle Emissions Are Major Contributor to Illinois Air Pollution

Illinois has a severe air pollution problem, and tailpipe pollution from cars and trucks are responsible for <u>nearly a third</u> of all Illinois emissions making transportation the most polluting sector in the state. At the same time Illinois has some of the most ambitious climate goals in the country that can't be met without cutting pollution from cars and trucks. A specific goal of Illinois' Climate and Equitable Jobs Act (CEJA) is having one million electric vehicles on the road by 2030.

Despite past efforts by Illinois government and industries, many Illinois residents experience ongoing air pollution at levels violating science health-based air pollution standards. This reality was reinforced by two new reports released last week (April 23). The American Lung Association's State of the Air 2025 <u>https://www.lung.org/research/sota</u> ranked the Chicago-Naperville area the 15th worst in the entire nation for ozone pollution; the precursors of this ground level smog include tailpipe emissions of NOx. Cook County also received failing grades for short-term PM2.5 and year-round PM2.5 pollution levels, similarly partially due to vehicle emissions.

Diesel traffic is particularly dangerous, representing only about 5% of average traffic but emitting up to <u>half of all nitrogen dioxide</u> pollution. The Clean Air Task Force's updated Deaths by Diesel <u>https://www.catf.us/deathsbydiesel/</u> ranked Illinois 2nd out of 49 states for cancer risk from diesel soot. It also projected significant other health risks from diesel emissions including

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heart attacks, acute bronchitis, upper and lower respiratory symptoms, asthma induced emergency room visits, asthma exacerbation. These result in restricted activity and lost work days.

IPCB now knows with certainty the vast, harmful impacts that vehicle emissions have on human health. These infringe upon Illinois residents' healthful environment by increasing rates of asthma, impaired lung function, heart disease, and cancer. *See* Health Effects Institute, *HEI Panel on the Health Effects of Long-Term Exposure to Traffic-Related Air Pollution Executive Summary* (2022) at 8.

ELPC has engaged on clean air and transportation issues for decades, including years doing <u>air</u> <u>quality monitoring</u> with youth and community members. Analyzing two substantial data sets from ELPC's five-year handheld monitoring program and from the Microsoft research project eclipse two-year stationary monitoring program, we found PM2.5 pollution especially high near highways, major arterial roads, and trains.

By the Kennedy, Eisenhower, lakeshore drive, skyway, and especially Dan Ryan highways, <u>air</u> <u>monitors consistently recorded</u> median levels of PM 2.5 over 20 micrograms per square meter. For example, ELPC volunteers recorded a median PM level of 21 at 47th and the Dan Ryan, near an intermodal facility along the highway. Microsoft Research monitors recorded levels over 25 at three locations along 90 further south: at State and 63rd, State and 83rd, and 106th and Avenue D. These all exceed US EPA's standard; annual average readings over 9 micrograms per square meter are considered unhealthy.

Studies demonstrate that heavy truck traffic disproportionately impacts the city's south and west sides, especially lower-income communities of color, and our data reflected that trend. One <u>quarter of all U.S. freight</u> passes through the Chicagoland region and over half of all intermodal shipments originate from or terminate here. Daily these generate over 15,000 truck trips to customers and 7,500 trips between intermodal facilities where trains and trucks exchange freight.

As ELPC's mobile air quality monitoring confirms, the Chicago region is heavily impacted by vehicle emissions, particularly from medium- and heavy-duty vehicles like trucks. *See* Environmental Law & Policy Center, *Air Quality Chicago: Using Community Science to Reduce Particulate Pollution & Protect Public Health* (2024); *see also* Chicago Metropolitan Agency for Planning, *Regional Strategic Freight Direction* (2018) at 1 (noting that one in seven vehicles on urban interstate highways in Illinois are trucks and some Chicago facilities receive over 30,000 trucks daily). This results in substantial amounts of diesel pollution, primarily on the South and West sides of Chicago, where some neighborhoods see over 400 trucks passing through each hour. *See* Rule Proponents' Proposed Clean Car and Truck Standards: 35 Ill. Admin Code Part 242, *In the Matter of: Proposed Clean Car and Truck Standards* (June 27, 2024) at 31 (citing Carolina Macias, et al., *Chicago Truck Data Portal*, (2023), https://apps.cnt.org/truck-count-

tracker/). ELPC's monitoring demonstrated that the South and West sides of Chicago experience higher rates of PM_{2.5} pollution. *See* Environmental Law & Policy Center, *Air Quality Chicago: Using Community Science to Reduce Particulate Pollution & Protect Public Health* (2024) at 21.

If free choice were available, no one would choose to live in communities bordered by highways and heavy-duty vehicle traffic that are overburdened by PM_{2.5}, ozone, and nitrogen dioxide pollution. *See e.g.*, Victoria A. Lang, et al., *Assessing the Air Quality, Public Health, and Equity Implications of an Advanced Clean Trucks Policy for Illinois* (March 10, 2025). But, many Illinois residents, particularly low-income communities and communities of color in Illinois, are subjected to these conditions. *See id.* at 17 (noting that census tracts with the largest health impacts from medium- and heavy-duty vehicle pollution are 45% Black compared to the Greater Chicago region which is 17% Black); *see also* Rule Proponents' Proposed Clean Car and Truck Standards: 35 Ill. Admin Code Part 242, *In the Matter of: Proposed Clean Car and Truck Standards* (June 27, 2024) at 31–33.

Illinois Can and Should Adopt the Advanced Clean Truck Rule

The federal Clean Air Act authorizes Illinois to adopt the Clean Car and Truck Standards. *See* 42 U.S.C. § 7507. Under the Clean Air Act, California is permitted to adopt and enforce its own emissions standards. *See* 42 U.S.C. § 7543(b). The Clean Air Act gives every other state, including Illinois, the option to adopt either federal vehicle emissions standards or California's more stringent and environmentally protective standards. *See* 42 U.S.C. § 7507. As will be explained below, the proposed Clean Car and Truck Standards, which are identical to the California vehicle emissions standards as required by 42 U.S.C. § 7507, are more protective of human health than the federal standards.

The Clean Car and Truck Standards are necessary to provide and maintain a healthful environment for the people of Illinois. A healthful environment is the "quality of physical environment which a reasonable man would select for himself were a free choice available." *See* General Government Committee at 701. Illinois courts have held that healthful environment should be defined based on the direct effects of environmental harm on human health. *See Glisson v. City of Marion*, 720 N.E.2d 1034, 1042–44 (1999).

The Illinois General Assembly has stated that reducing air pollution from vehicle emissions and encouraging the use of electric vehicles is necessary to protect human health. *See e.g.*, 415 ILCS 120/5 ("The General Assembly declares that it is the public policy of the State to promote and encourage the use of electric alternate fuel in vehicles as a means to improve air quality . . ."); 35 ILCS 55/5; 625 ILCS 5/11-1429(a).

Focusing on truck emissions, which are disproportionately diesel emissions, the adoption of the Advanced Clean Trucks Standard ("ACT") would save lives and protect the health of current and future generations. Currently, medium- and heavy-duty vehicles contribute to approximately 1,330 premature deaths each year and 1,580 new cases of pediatric asthma due to nitrogen dioxide exposure. *See* Victoria A. Lang, et al., *Assessing the Air Quality, Public Health, and Equity Implications of an Advanced Clean Trucks Policy for Illinois* (March 10, 2025) at 17. Illinois adopting the Advanced Clean Trucks Standard would prevent 500 premature deaths and 600 new pediatric asthma cases by 2050. *Id.*

The just released Deaths by Diesel report similarly projects numerous additional health benefits Illinois could experience from adoption of the ACT: lives saved, avoided heart attacks, avoided cases of acute bronchitis, avoided cases of upper and lower respiratory symptoms, avoided emergency room visits for asthma, avoided cases of asthma exacerbation, avoided restricted activity days, avoided work loss days and avoided monetized health damages all due to reduced PM2.5 from diesel, reduced NOx, SO2, NH3, and PM2.5. <u>https://www.catf.us/deathsbydiesel/</u>

Further, the ACT standard is necessary to protect Illinois children, who are particularly vulnerable to the health impacts of diesel emissions. Nearly 1 million Illinois children ride on the 23,000 school buses in Illinois, the vast majority of which are diesel. *See 2023-2024 SchoolBusFleet.com* (December 2024) at 12. Riding diesel buses to and from school daily exposes children to emissions which impede children's lung development and increase rates of childhood asthma. *See e.g.*, Sara D. Adar, et al., *Adopting Clean Fuels and Technologies on School Buses. Pollution and Health Impacts in Children*, 191 Am. J. of Respiratory and Critical Care Med. 12 (2015). Pre-schoolers on buses (such as Headstart students) may develop asthma and wheezing from early exposure to ozone at levels well below the current EPA standard. See *Early-life ozone pollution linked to higher asthma risk in young kids*, JAMA Network Open (April 2025). The IPCB can protect the right to a healthful environment of this and future generations of school children by adopting the ACT Standard to encourage the switch to cleaner buses. Adopting the ACT Standard would further facilitate the ongoing transition to electric school buses.

Finally, the ACT Rule would play a critical role in reaching CEJA's electric vehicle goal by ensuring manufacturers supply enough electric vehicles to IL dealers. The ACT rule gives flexibility to manufacturers as to how to meet gradually increasing proportion of zero emission vehicles sold. With increasing numbers and types of EVs being made, manufacturers make more models available to states with ACT targets.

Adopting Advanced Clean Truck Rule is Feasible – Role of Electric School Buses

Adopting the ACT provides Illinois with the opportunity to improve air quality, protect public health AND save school districts operational costs (due to lower fuel and maintenance costs).

Electric School Buses (ESBs) can be a key component of meeting ACT as they are included in the rule's requirements for Class 4-8 vehicles, which covers most school buses. https://www.act-news.com/news/meeting-advanced-clean-trucks-rule-requirements-with-electric-school-buses/

Existing federal (Clean School Bus Program, Clean Heavy-Duty Vehicle Program), state (Volkswagen Mitigation Trust Fund) and state utility (ComEd and Ameren) funding make it possible for many school districts to adopt the electric school buses manufacturers are now producing. Manufacturers are ready with rapidly developing ESB technology (see CALSTART, *The Electrification of School Buses Assessing Technology, Market, and Manufacturing Readiness market study* (April 2023). There are already more than 20 ESB models available in North America, with more in the works to address the needs for smaller (type A) buses to serve special education and smaller districts.

The daily mileage of most trucks (including school buses) on the road falls well within the range of currently available zero-emission models. Over 85 percent of Medium/Heavy Duty Vehicles travel fewer than 100 miles each day, meaning that most buses could reasonably run their daily routes with zero-emission buses and refuel overnight at their school/depot or driver's home. (adapted from Ready for Work 2.0, https://www.ucs.org/sites/default/files/2025-03/ready-for-work-2-es.pdf)

Illinois has started the school bus transition. With support from federal and state programs, in less than 8 years Illinois has leapt from 0 to nearly 800 electric school buses awarded to our school districts and bus companies. These numbers will grow as Illinois electric utilities' fleet electrification programs, only recently underway thanks to CEJA, mature and are more effectively implemented.

Illinois Commerce Commission very recently approved both ComEd and Ameren's Beneficial Electrification Plans 2.0 which provide upfront funding for school bus electrification and additional compensation for storing energy when school buses are not in use. (ComEd's approved plan <u>here</u>; Ameren's approved plan is <u>here</u>.) Three programs particularly support Illinois school districts' purchasing electric school buses:

(1) **Upfront Cost Support:** ComEd's point of purchase rebates of up to \$200,000 for new or repowered electric school buses may be paired with previously awarded or distributed federal funds. Both ComEd and Ameren also offer subsidies to install chargers and other "make-ready" charging infrastructure.

(2) **New Ongoing Financial and Other Benefits:** Participation in ComEd's or Ameren's school bus pilot programs will offer increased cost savings on electricity, improved grid resiliency for school facilities and neighbors, and even additional monthly compensation for returning power back to the grid; and

(3) **Technical Support:** Fleet assessments to help school districts make the transition to electric school buses by assisting with applications for rebates and incentives.

ACT accelerating electric school bus transition - positive impacts on student health, performance and climate

Among the numerous studies showing the benefits of getting students out of diesel buses are:

Upgraded school buses linked to increased student attendance. See Pedde, M., et al. *Randomized design evidence of the attendance benefits of the EPA School Bus Rebate Program.* Nat Sustain **6**, 838–844 (April 2023). https://doi.org/10.1038/s41893-023-01088-7

Districts selected for funding that replaced the oldest school buses had improvements in attendance, educational performance, and ambient PM_{2.5} concentrations in the year after the lottery (for new school bus funding) as compared to districts not selected for funding. *See e.g.,* Sara D. Adar, *et al, Assessing the National Health, Education, and Air Quality Benefits of the EPA's School Bus Rebate Program: A Randomized Controlled Trial Design,* Health Effects Institute (Research Report 221, 2024).

<u>Research by the Union of Concerned Scientists</u> shows that over their lifetimes, electric school buses emit less climate pollution and have the smallest impact on public health compared to any other vehicle fuel, even after taking into consideration emissions from the electricity that powers them, any extraction of fossil fuels used in generating electricity, and health impacts related to brake and tire wear while driving. See Dr Dave Cooke, *Mapping Heavy-Duty Truck Alternatives*, Union of Concerned Scientists (September 2024) Union of Concerned Scientists' <u>Clean Truck Map Tool</u> assesses health impact and greenhouse gas emissions of different truck types, including school buses. It shows that regardless of truck type and the state of the electric grid (business as usual or decarbonized) global warming emissions are lower with electric than diesel school buses.

A Harvard study released last May found that "Deploying one electric school bus in replacement of a diesel bus could result in up to \$207,000 in climate and health benefits." See Ernani F. Chomaa, et al, *Adopting electric school buses in the United States: Health and climate benefits*, PNAS https://doi.org/10.1073/pnas.2320338121 (May 2024)

Illinois would be Supported in Implementing ACT - NESCAUM is able and willing

Illinois would join 11 other states which have already adopted ACT. The Northeast States for Coordinated Air Use Management (NESCAUM) leads the Multi-State Zero-Emission Vehicle Task Force, a forum for states that have adopted California's ZEV regulation to collaborate on complementary policies and programs and coordinate actions to support and ensure the successful implementation of zero-emission vehicle programs. As a coalition of state air agencies, NESCAUM was founded in 1967 to address air pollution from power plants in New England. Today, it is a nonprofit association that "guides and supports efforts by state governments to accelerate the nation's transition to clean transportation" by providing regulatory and technical support, proposing effective policies and programs, and facilitating multi-state collaboration. As other states throughout the country have adopted California standards, NESCAUM has expanded to include and welcome new states beyond the Northeast.

NESCAUM has over fifty years of experience in coordinating and supporting collaboration across states to devise, implement, and scale effective solutions to air pollution and climate change, putting them in an excellent position to aid Illinois in adopting California Clean Vehicle Standards.

NESCAUM developed two action plans in coalition with the multi-state Zero-Emission Vehicle (ZEV) Program Implementation Task Force. These comprehensive plans included an assessment of the current ZEV market and strategic action recommendations.

NESCAUM can provide regulatory and technical support to states that are looking to enact policies to control air pollution from vehicles. For example, NESCAUM has already supported states in adopting California's Advanced Clean Cars regulations, conducted emissions testing for trucks, analyzed benefits of several truck standards adoption scenarios, and advocated for stronger federal standards.

A recent NESCAUM report <u>here</u> highlights the success of clean vehicle standards in accelerating EV adoption. Ten states who joined a memorandum of understanding to collaborate on advancing EV adoption achieved their collective goal of putting 3.3 million EVs on their roads by 2025. Charging infrastructure and EV model availability in the MOU states have also significantly increased since they joined the 2013 agreement. (see pp. 4, 7)

Paul Miller, NESCAUM Executive Director, <u>said</u> "Time and again, we've heard that the states' clean vehicle programs are unrealistic. Yet time and again, the states have shown that when they set ambitious goals, then cooperate in support of them, success follows."

The California Air Resources Board recently released <u>this fact sheet</u> responding to several false and misleading industry claims, some of which have been raised in this PCB proceeding. "Compliance flexibility and certainty for manufacturers and dealers is built into the regulation. To comply, sales are averaged over a three-year period. Manufacturers can use banked credits from earlier years to meet future requirements and deficits can be carried forward for up to three years if they fall short of the required credits in any given year. Manufacturers can also trade credits with fellow manufacturers."

Time is of the essence

Unfortunately, there are efforts now afoot to rip away states' ability to adopt ACT and protect their residents' air quality and health. While this option exists, Illinois is perfectly placed to act on behalf of its residents. We urge the Pollution Control Board to adopt the ACT.

Respectfully submitted,

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