Comments of Massachusetts; California, by and through the Attorney General and the California Air Resources Board; Connecticut; Delaware; the District of Columbia; Illinois; Iowa; Maine; Maryland, by and through the Attorney General and the Maryland Department of the Environment; Minnesota; New Jersey; New York; Oregon; Vermont; and the City of New York

July 1, 2021

Via Electronic Filing on www.regulations.gov

Andy Chang
U.S. Environmental Protection Agency
Stratospheric Protection Division
1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the American Innovation and Manufacturing Act, 86 Fed. Reg. 27,150 (May 19, 2021)
Docket ID No: EPA-HQ-OAR-2021-0044

Dear Mr. Chang:

The Attorneys General of Massachusetts, California, Connecticut, Delaware, the District of Columbia, Illinois, Iowa, Maine, Maryland, Minnesota, New Jersey, New York, Oregon, and Vermont; and the California Air Resources Board and the Maryland Department of the Environment (collectively, the States); and the City of New York appreciate the opportunity to comment on the U.S. Environmental Protection Agency's (EPA) proposed rule entitled *Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the American Innovation and Manufacturing Act*, 86 Fed. Reg. 27,150 (May 19, 2021) (Proposed Rule). The States and the City of New York support EPA's prompt action in the Proposed Rule to implement the important hydrofluorocarbon (HFC) phasedown provisions of the American Innovation and Manufacturing Act, Pub. L. 116-260, § 103 (AIM Act), to reduce emissions of these dangerous chemicals and protect our climate. We offer the following comments on EPA's proposal.[1]

BACKGROUND & STATE INTERESTS

HFCs are used in a variety of end uses—including air conditioning, refrigeration, foam blowing agents, and aerosol propellants—often as a substitute for ozone-depleting substances. As EPA has long recognized, HFC compounds are potent greenhouse gases that accelerate climate change and endanger public health and welfare. *See* 74 Fed. Reg. 66,496, 66,497 (Dec.

[1] We do not comment here on management of HFCs and HFC substitutes or facilitating the transition to next-generation technologies by restricting use of HFCs in certain sectors or subsectors, which are beyond the scope of this rulemaking. *See* 86 Fed. Reg. at 27,153.

15, 2009). Indeed, some HFCs are thousands of times more climate-damaging than carbon dioxide. 81 Fed. Reg. 82,272, 82,278 (Nov. 18, 2016).[2] And HFC emissions are on the rise. According to the latest EPA inventory, HFC emissions have increased by 26% since 2005 and 85% since 1990.[3] Because of HFCs' high global warming potentials (GWPs), significant emission volumes, and relatively short lifespans in the atmosphere, near-term reductions in HFC emissions can have significant impact. As the Intergovernmental Panel on Climate Change (IPCC) has recently recognized, the United States *must* take immediate action to drastically reduce HFCs and other fluorinated gases to mitigate the most severe risks of catastrophic climate change.[4]

The States and the City of New York share a substantial interest in protecting the health of our residents and natural resources from the risks of harmful HFC emissions. *See Nat. Res. Def. Council v. Wheeler*, 955 F.3d 68, 77 (D.C. Cir. 2020) (finding "the release of HFCs contributes to climate change" that harms States). Climate change is already imposing substantial harms and costs on the States and the City of New York and our residents. 86 Fed. Reg. at 27,156; *see also Massachusetts v. EPA*, 549 U.S. 497, 523 (2007). The last seven years have been the warmest on record, with 2020 tied for the lead.[5] Wildfires, heat waves, increases in the frequency and severity of extreme weather events, sea-level rise, changes in agriculture and food production, precipitation changes, and other climate-change harms threaten our residents' health and our economies and natural resources.[6] Recently, for instance, many of our States have suffered an unprecedented 2020 hurricane season.[7] Following a record-setting wildfire season in 2020—with 10,000 fires burning over 4.2 million acres[8]—California is currently facing a drought-induced state of emergency that threatens water quality, agriculture, fisheries, and other important state interests.[9] And in 2020, Massachusetts experienced significant or critical drought conditions in every corner of the Commonwealth.[10] Importantly, the dire consequences of climate change will continue to disproportionately impact Environmental Justice communities in our States and the City of New York, including Black and

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[2] *See also High-GWP Refrigerants*, Cal. Air Res. Bd., https://ww2.arb.ca.gov/resources/documents/high-gwp-refrigerants.

[3] EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2019 – Data Highlights* (Apr. 2021), https://www.epa.gov/sites/production/files/2021-04/documents/us-ghg-inventory-1990-2019-data-highlights.pdf.

[4] IPCC, *Global Warming of 1.5°C*, at 118, 157 (V. Masson-Delmotte et al. eds., 2019), http://ipcc.ch/report/sr15/.

[5] Press Release, Nat'l Aeronautics & Space Admin., 2020 Tied for Warmest Year on Record, NASA Analysis Shows (Jan. 14, 2021), https://www.nasa.gov/press-release/2020-tied-for-warmest-year-on-record-nasa-analysis-shows.

[6] *See, e.g.*, U.S. Global Change Research Prog., *Climate Science Special Report: Fourth National Climate Assessment*, Vol. I, at 10 (D.J. Wuebbles et al. eds., 2017), https://science2017.globalchange.gov/.

[7] *See* Nat'l Oceanic & Atmospheric Admin., *2020 Atlantic Hurricane Season takes infamous top spot for busiest on record* (Nov. 10, 2020), https://www.noaa.gov/news/2020-atlantic-hurricane-season-takes-infamous-top-spot-for-busiest-on-record.

[8] CalFire, *2020 Fire Season*, https://www.fire.ca.gov/incidents/2020/ (last visited June 30, 2021).

[9] Gov. Gavin Newson, State of Emergency Proclamation (Apr. 21, 2021), https://water.ca.gov/-/media/DWR-Website/Web-Pages/What-We-Do/Drought-Mitigation/Files/42121DroughtProclamationay11.pdf.

[10] *Massachusetts September 2020 Drought Status* (Oct. 9, 2020), https://www.mass.gov/doc/september-2020/download.

Latinx populations and low-income populations, as well as Native American tribal communities, which already bear a disproportionate burden of public health and environmental hazards.[11]

For all of these reasons, our States have been at the forefront of tackling the climate crisis, including through efforts to reduce HFC production and consumption. For example:

- Massachusetts has committed to achieving net-zero economywide greenhouse gas emissions by 2050, with interim emissions limits of 50% below the 1990 emissions level by 2030 and 70% by 2040 and a carbon-free power sector by 2035. St. 2021, c. 8, §§ 8–10. As part of its aggressive strategy to reduce greenhouse gas emissions, the Commonwealth has prohibited use of HFCs by certain end-users. *See* 310 C.M.R. § 7.76.

- California has committed to achieving carbon neutrality by 2045. Executive Order B-55-18. This includes a commitment to achieve 100% renewable energy by 2045 and 100% zero-emission cars and trucks sales by 2035. *See* Senate Bill 100 (De Leon, Stat. 2018, ch. 312); Executive Order N-79-20. California has specific HFC-reduction targets under Senate Bill 1383, which mandates a 40% reduction in HFC emissions below 2013 levels by 2030. To meet that target, and as part of California's greenhouse gas emission-reduction strategy,[12] California adopted its Short-Lived Climate Pollutant Strategy[13] to combat these powerful pollutants. Of significance, California prohibited use of certain HFCs by certain end-users and is in the process of implementing GWP limits with an HFC reclaim program. *See* Health & Saf. Code § 39734; Cal. Code Regs., tit. 17, §§ 95371 *et seq.* Nevertheless, even with all of California's decarbonization efforts, high-GWP HFCs are expected to be among the last remaining persistent greenhouse gas emission sources in California in 2045.[14]

- Connecticut has established ambitious decarbonization goals for its power supply and for its broader economy. In 2018, Connecticut strengthened its statutory greenhouse gas emission-reduction requirements by adding an economy-wide target of a 45%

[11] *See* EPA, *Climate Change, Health, & Environmental Justice* (May 2016), https://www.cmu.edu/steinbrenner/EPA%20Factsheets/ej-health-climate-change.pdf; U.S. Global Change Research Program, *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*, ch. 9: Populations of Concern (Crimmins, A., et al., eds., 2016), https://health2016.globalchange.gov/.

[12] California adopted Assembly Bill 32 (Nunez, Stat. 2006, Ch. 488) in 2006 requiring reduction in greenhouse gas emissions to 1990 levels by 2020. *See* Health & Saf. Code § 38500 et seq. In 2016, California adopted Senate Bill 32 (Pavely, Stat. 2016, Ch. 249), requiring a 40% greenhouse gas emission reduction below statewide emission limit by 2030. See Health & Saf. Code § 38566.

[13] Cal. Air Res. Bd., SHORT LIVED CLIMATE POLLUTANT STRATEGY (Mar. 2017), Short-Lived Climate Pollutant Reduction Strategy (ca.gov).

[14] Energy and Envt'l Econs. Inc., *Achieving Carbon Neutrality in California – Pathways Scenarios Developed for the California Air Resources Board* 61–62 (Oct. 2020), https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf.

decrease below the 2001 emissions level by 2030. *See* Conn. Gen. Stat. § 22a-200a(a)(2).

- Delaware has committed to reduce statewide greenhouse gas emissions by 26–28% below 2005 levels by 2025 and to obtain 40% of its electricity from renewable sources by 2035. *See* 26 Del. C. §§ 351–64. Delaware has prohibited certain HFCs in certain end-uses through regulation. 7 Del. Admin. Code § 1151.

- Maine has committed to reduce greenhouse gas emissions by at least 45% below 1990 levels by 2030 and 80% below 1990 levels by 2050. 38 M.R.S. § 576-A. On June 14, 2021, Maine enacted a law to limit the use of HFCs to fight climate change. *Id*. § 1612. The statute prohibits the sale, lease, rent, installation, use, or entering into commerce of any product or equipment that uses or will use an HFC with high GWP intended for any air conditioning, refrigeration, foam, or aerosol propellant end use as determined by the Maine Department of Environmental Protection in rules to be promulgated. *See id.*

- Maryland, through the Greenhouse Gas Reduction Act, has committed to achieving a minimum of a 40% reduction in statewide greenhouse gas emissions from 2006 levels by 2030. *See* Annotated Code of Maryland, Env. Art. §§ 2-1201–1211. In addition, to help meet its aggressive climate and environmental goals for reducing greenhouse gases, in November 2020, Maryland adopted regulations to phase out the use of HFCs in foam products, refrigeration, commercial air-conditioning, and aerosol propellants, recognizing the availability of environmentally preferable alternatives. *See* COMAR 26.11.33.

- New Jersey has committed to reduce statewide greenhouse gas emissions by 80% below 2006 levels by 2050 and transition to 100% clean energy sources by 2050. N.J.S.A. 26:2C-40; Exec. Order 28. New Jersey law prohibits HFC use in certain end-uses. N.J.S.A. 26:2C-60 through 67.

- New York has committed to reduce statewide greenhouse gas emissions by 85% below 1990 levels by 2050 and to obtain 100% of its electricity from zero-emissions sources by 2040. N.Y. Envtl. Conserv. Law § 75-0107(1); N.Y. Pub. Serv. Law § 66-p(2). To help achieve these requirements, New York has prohibited certain HFCs in certain end-uses. N.Y. Comp. Codes R. & Regs. tit. 6, pt. 494.

- Vermont has committed to reduce statewide greenhouse gas emissions by 80% from 1990 levels by 2050, and to achieve net-zero emissions across all sectors by 2050. 10 V.S.A. §§ 578(a)(3) & 592(b)(4). Vermont has also committed to achieve interim statewide greenhouse gas emission reductions of 26% from 2005 levels by 2025, and 40% from 1990 levels by 2030. 10 V.S.A. § 578(a)(1)-(2). As part of its strategy to reduce greenhouse gas emissions, Vermont has enacted a phase-out of certain HFCs in certain end-uses. 10 V.S.A. § 586; Vt. Code R. 12 031 003, Ch. 38 [Lexis].

COMMENTS

I. EPA Should Swiftly Finalize the Proposed Rule as a Lawful and Critical Step Toward Reducing Harmful HFC Emissions.

EPA's Proposed Rule faithfully implements the AIM Act to phase down HFC production and consumption throughout the nation, reversing an unlawful and misguided trend toward loosening restrictions on harmful HFC pollution under the previous Administration. EPA should quickly finalize and begin implementing this critical program.

The AIM Act—enacted with bipartisan and diverse stakeholder support on December 27, 2020—directs EPA to reduce HFC pollution by, among other things, establishing an allowance-allocation program to phase out both production and consumption of eighteen HFC substances by 85% by 2036, with interim targets along the way. Pub. L. 116-260, § 103(e). Many of the undersigned States supported passage of the AIM Act and its aggressive phasedown schedule as an important measure to significantly reduce climate-warming emissions and expand American manufacturing jobs, including through manufacture of HFC substitutes.[15]

In the Proposed Rule, EPA has done as Congress instructed to protect our climate and our economy. Specifically, the Proposed Rule, if finalized, would: set HFC production and consumption baselines according to the statutorily prescribed formulae (86 Fed. Reg. at 27,163–66, 27,210); establish HFC production and consumption allowance allocation and transfer methodology and procedures (*id.* at 27,166–79, 27,210–15); prohibit production and consumption in excess of held allowances (*id.* at 27,209–10); mandate the phasedown of HFC production and consumption according to the schedule set forth in the Act (*id.* at 27,210); strictly regulate international trade and import of HFCs (*id.* at 27,179–83, 27,214–18); and require detailed and transparent recordkeeping and reporting to track production, import, export, transformation, use, destruction, and reclamation of HFCs (*id.* at 27,215–23). *See also* Pub. L. 116-260, §§ 103(e)(2), 103(d), 103(j). EPA's prompt and comprehensive implementation of these requirements will ensure the goals of the AIM Act are realized, with massive societal benefits. Indeed, according to EPA estimates, the Proposed Rule would result in projected annual net benefits—including health effects and other avoided climate harms—of $2.6 billion in 2022 and $17.9 billion in 2036. 86 Fed. Reg. at 27,201. We thus support EPA's proposal to implement the AIM Act's HFC phasedown requirements as Congress intended.

[15] *See* Written Testimony of the Attorneys General of New York, California, Delaware, Illinois, Massachusetts, Minnesota, New Jersey, Oregon, Vermont, Washington, and the District of Columbia submitted to the U.S. Senate Comm. on Env't & Pub. Works on S. 2754, American Innovation and Manufacturing Act of 2019 (Apr. 8, 2020); Comments of the Cal. Air Resources Bd., Wash. State Dep't of Ecology, & N.Y. Dep't of Conservation submitted to the U.S. Senate Comm. on Env't & Pub. Works on S. 2754, American Innovation and Manufacturing Act of 2019 (Apr. 9, 2020).

II. EPA Should Maximize Benefits, and Fully Assess and Minimize Any Potential Harms, to Environmental Justice Communities and Native American Tribal Communities in Its Final Rule.

The States and the City of New York also support EPA's attention in the Proposed Rule to the disproportionate harms that air pollution and climate change pose to Environmental Justice communities and Native American tribal communities—populations that are already overburdened by pollution and health hazards and more vulnerable to climate-change harms. *See* 86 Fed. Reg. at 27,158. And we support EPA's efforts to implement the directives in Executive Orders No. 12,898 and No. 14,008 by identifying and attempting to mitigate any potential adverse impacts of this rulemaking on Environmental Justice communities and Native American tribal communities. *See* 86 Fed. Reg. 7619 (Jan. 27, 2021); 59 Fed. Reg. 7629 (Feb. 16, 1994).

As noted above, Environmental Justice communities and Native American tribal communities in our States and across the country are already experiencing the most damaging effects of a changing climate. For instance, Environmental Justice communities are already experiencing worse health outcomes and increased mortality from extreme heat events,[16] which are increasing in frequency and duration due to climate change.[17] Environmental Justice communities also experience disproportionate damage from natural disasters exacerbated by climate change.[18] For example, when Hurricane Harvey hit Texas, Hispanic and Black residents faced more extensive flooding than white residents, and lower-socioeconomic-status households experienced more extensive flooding than higher-socioeconomic-status households.[19] Degradation of natural and cultural resources caused by climate change also threatens Native Americans' traditional subsistence lifestyles and cultural traditions. *See* 86 Fed. Reg. at 27,158.

Well-considered and targeted policy efforts are necessary to ensure that Environmental Justice communities and Native American tribal communities experience the benefits of, and are not detrimentally impacted by, any changes in behavior due to implementation of climate policies.[20] We are encouraged that EPA is seeking comment on, and will closely monitor, the impacts of this rulemaking on emissions levels in communities that are already disproportionately affected by air pollution and climate harms. Below are several ways that EPA

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[16] *See* U.S. Global Change Research Program, *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*, ch. 2: Temperature-Related Death and Illness (Crimmins, A., et al., eds., 2016), https://health2016.globalchange.gov/; EPA, *Climate Change Indicators: Heat-Related Deaths* (Apr. 2021), https://www.epa.gov/climate-indicators/climate-change-indicators-heat-related-deaths; *see also* Northeast Climate Adaptation Science Ctr., *Massachusetts Climate Change Projections-Statewide and for Major Drainage Basins* 4–5, 7 (Mar. 2018), https://resilientma.org/resources/resource::2152 (projecting that Massachusetts will continue to experience an increasing number of days of extreme heat in urban areas with low tree cover).

[17] *See* IPCC, *Climate Change 2014: Synthesis Report* 7–8 (2014), https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf.

[18] *See* Timothy Collins, et al., *Environmental injustice and Hurricane Harvey: A household-level study of socially disparate flood exposures in Greater Houston, Texas, USA*, 179 Envtl. Research 1 (2019), https://par.nsf.gov/servlets/purl/10132227.

[19] *Id.*

[20] *See, e.g.*, Christa Anderson et al., *Climate Change Mitigation, Air Pollution, and Environmental Justice in California*, 52 Environ. Sci. Technol. 10,829 (2018), https://pubs.acs.org/doi/10.1021/acs.est.8b00908.

can seek to ensure that harms from its Proposed Rule are minimized for Environmental Justice communities adjacent to existing and future HFC and HFC-substitute facilities.

First, EPA should closely monitor Environmental Justice communities adjacent to existing and any future HFC- and HFC-substitute-production facilities for both related toxic air pollutants,[21] as well as other existing pollutants emitted by facilities that disproportionately burden adjacent communities. *See* EPA, *Draft Regulatory Impact Analysis for Phasing Down Production and Consumption of Hydrofluorocarbons (HFCs)*, Doc. ID No. EPA-HQ-OAR-2021-0044-0046, att. 2, at 135 tbl.6-23 (2021) (Draft RIA). Monitoring is critical to understand how implementation of EPA's Proposed Rule changes the levels of pollution impacting adjacent communities. As EPA notes in its Draft RIA for the Proposed Rule, a notably higher percentage of Black individuals live near an HFC-production facility compared to the rural or overall national averages, and the median income is lower for households living near HFC-production facilities compared to either national average. *Id.* at 119. That proximity indicates that the toxic air pollutants generated by such facilities are likely to disproportionately impact Black and lower-income communities. Existing pollutant and demographics data are available on EPA's Environmental Justice Screening and Mapping Tool (EJScreen)[22] to identify: (a) whether an adjacent community is already vulnerable to the health effects of environmental pollution and therefore should be prioritized by EPA in mitigating any additional adverse impacts from its Proposed Rule; and (b) a baseline against which the effects of EPA's Proposed Rule can be measured over time. As EPA indicates in its Draft RIA, the communities near each facility differ in their demographics and cancer and respiratory illnesses risks, so it is particularly important to examine the community characteristics and emissions impacts for each facility separately and tailor baselines to each community. *Id.* at 119.

Second, the States urge EPA to design an allocation system with sufficient allowance-trading reporting requirements to ensure EPA can effectively monitor where and when production-related emissions are occurring and protect adjacent communities from disproportionately high emissions. EPA indicates that it proposes, at least initially, to issue allowances at a company level, rather than at a facility level. 86 Fed. Reg. at 27,204. EPA acknowledges, however, that such allocation would impede EPA's ability to evaluate impacts to Environmental Justice communities, because under the current proposal, there is no way to track which facility a company with multiple facilities uses for its allowances, among other reasons. *See* Draft RIA at 130–31.[23] Furthermore, EPA is anticipating that many of the existing HFC-

[21] For example, toxic chemicals that are used as a feedstock or catalyst or released as a byproduct of hydrofluoro-olefin production include chlorine, chloroform, hydrochloric acid, hydrogen fluoride, and antimony, chromium, and nickel compounds.

[22] EJScreen is a mapping tool that overlays demographic information, environmental indicators, existing sources of pollution, and boundaries information such as nonattainment areas for various air pollutants under the Clean Air Act, and, based on that information, scores and ranks every census tract in the United States as to pollution impact. EPA can use the EJScreen scores of communities near HFC-production facilities to determine whether a community should be prioritized in mitigating the adverse impacts from the Proposed Rule. EPA's Draft RIA appears only to consider the National Air Toxics Assessment (NATA) Risks for its community pollution profiles. Draft RIA at 116, 122–27. EPA should take into account other data that EJScreen offers, including the particulate matter 2.5, ozone, hazardous waste, and wastewater discharge indicators, to complete a more comprehensive assessment of the total environmental impacts borne by the communities.

[23] Large HFC producers such as Chemours have multiple HFC-production facilities in the United States, *see id.* at

producing facilities will produce HFC substitutes, *see* Draft RIA at 131; but, EPA is unable to identify which substitutes, in what quantities, and where they will be produced, and is unable to predict how much allowance trading will occur, and between which companies.

To overcome those information gaps and gather data with sufficient granularity to guide EPA's future allowance allocation, the States urge EPA to: (a) issue allowances at a facility level; (b) require that the emissions and allowances be matched at the facility level when it comes time to surrender or retire the allowances; and (c) require the public release of facility-specific allowance trading and emissions data that is sufficient to demonstrate that transfers of allowances among facilities would not increase risks in nearby Environmental Justice communities. *See* 86 Fed. Reg. at 27,204. These steps, taken together, would help EPA identify and limit the potential for disproportionately high production of HFCs at any given facility that could render neighboring communities vulnerable to higher toxic air emissions.

Third, and relatedly, EPA should require annual public reporting by each facility on the quantity of HFC-related toxic air pollutants used or produced by each facility to track the burdens experienced by adjacent communities as a result of the Proposed Rule. EPA should integrate these data into its rulemaking in an iterative manner beyond 2024, by tracking the emissions data and adjusting its issuance of allowances to facilities based on annual (or at least biannual) reassessments of the emissions burdens on local communities. Such an iterative process is necessary to determine whether certain facilities may be accumulating more allowances than others and using the allowances to generate the same or higher levels of toxic air pollutants harmful to Environmental Justice communities rather than reducing these levels over time.

Fourth, EPA should monitor and account for potential indirect pollution effects of its Proposed Rule that impact Environmental Justice communities. For example, implementation could result in changes in truck traffic to and from facilities that may be importing more feedstock or disposing of more byproducts resulting from the changes in their production volumes. Truck traffic can be a major source of air and noise pollution in communities located near industrial facilities,[24] and increased truck traffic may significantly contribute to the existing pollution burdens of these communities.[25] If EPA's monitoring data indicate that increased allowances issued to a facility are correlated with an increase in truck traffic through a

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104 tbl.6-1, and, if issued allowances at the company level, may conceivably use those allowances to cover emissions from just one or two facilities, which would result in concentration of air toxics emissions and their effects upon communities near those sites.

[24] Cal. Air Resources Bd., *Overview: Diesel Exhaust & Health*, https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health (last visited June 30, 2021); Inkyu Han, *Effects of train and truck traffic on noise levels in urban communities*, 141 J. Acoustical Soc'y of America 3882 (2017), https://doi.org/10.1121/1.4988694.

[25] Diesel truck engines contribute to emissions of ozone, which causes lung inflammation and increased asthma-related emergency room visits; particulate matter 2.5, fine particles that cause heart and lung diseases; and diesel particulate matter, a toxic air contaminant causing increased cancer risk. Cal. Off. of Envtl. Health Hazard Assessment, *Air Quality: Ozone*, https://oehha.ca.gov/calenviroscreen/indicator/air-quality-ozone (last visited June 30, 2021); Cal. Off. of Envtl. Health Hazard Assessment, *Air Quality: PM2.5*, https://oehha.ca.gov/calenviroscreen/indicator/air-quality-pm25 (last visited June 30, 2021); Cal. Off. of Envtl. Health Hazard Assessment, *Diesel Particulate Matter*, https://oehha.ca.gov/calenviroscreen/indicator/diesel-particulate-matter (last visited June 30, 2021).

neighboring Environmental Justice community, then, in future rulemakings, EPA should consider that additional information and make changes to the rule to mitigate any such impacts on that community.

Fifth, EPA indicates that it is soliciting data and other information regarding potential effects of the Proposed Rule on communities adjacent to HFC-production facilities. Due to technological, informational, and language barriers, however, community feedback may not be well represented in response to EPA's Notice. Therefore, the States encourage EPA to hold direct, in-person informational workshops in communities adjacent to HFC-production facilities, and provide for relevant translation services, to ensure that information about the Proposed Rule is disseminated and that community feedback is well represented. EPA can further disseminate information related to its Proposed Rule by enlisting the help of local Environmental Justice advocacy groups that have built trust with the local communities to engage communities in meetings regarding the impacts of the Proposed Rule and to facilitate their feedback. These groups include, for example: Texas Environmental Justice Advocacy Services based in Houston; Deep South Center for Environmental Justice based in New Orleans, Louisiana; Illinois Environmental Justice Council based in Springfield; Kentuckians for the Commonwealth based in London, Kentucky; New Jersey Environmental Justice Alliance based in Trenton; Arkansas Citizens' Climate League based in Hackett; Tennessee River Keeper based in Decatur, Alabama; and local Sierra Club chapters.

Furthermore, while EPA has indicated that the Proposed Rule does not have tribal implications as specified in Executive Order No. 13,175, EPA should nonetheless consult with tribal governments to fully understand and address all potential impacts. For example, to the extent that the Proposed Rule leads to the siting of new facilities or increased generation of byproducts requiring disposal, EPA should consult with nearby tribal governments on how and where the byproducts are being disposed of to determine whether the Proposed Rule may cause a disturbance of sacred sites and other tribal resources or cause other impacts on tribes that should be considered and addressed.

Finally, to ensure its Proposed Rule does not operate in a vacuum, EPA should account for the polluting effects of other nearby EPA-permitted facilities or other EPA programs in its issuance of allowances for any facility that could impact Environmental Justice Communities, and vice versa. EPA's consideration of the cumulative effects of nearby facilities from other polluting industries would help the agency make informed decisions that reduce the overall pollution burdens in adjacent communities. Additionally, sharing this information with Environmental Justice communities as part of its rule development outreach—specifically about how this rule would operate in concert with other relevant EPA rules—could help to support effective transparency, engagement, and capacity and relationship-building within the communities most impacted. To further this effort to ensure EPA's rules are well designed in the context of other EPA rules, EPA should also require any newly constructed HFC-production and HFC-substitute-production facilities to operate with higher standards, such as by further limiting the volume of chemical feedstocks and byproducts emitted as part of the production process in new facilities.

III. EPA's Final Rule Should Include Strict Monitoring, Reporting, and Enforcement Mechanisms and Reduce Supply Chain Risk to Ensure Meaningful Reductions in HFC Emissions.

It is critical that implementation of EPA's phasedown program results in verifiable and meaningful reductions in harmful HFC emissions, as Congress intended in adopting the AIM Act. To help ensure the program's success, we urge EPA to adopt strict monitoring, reporting, enforcement, and compliance provisions, as contemplated in the Proposed Rule. *See* 86 Fed. Reg. at 27,183–87. Specifically, we support EPA's proposal for: administrative consequences; requirements for packaging (including ban on disposable cylinders) and labeling (including specifying the quantity of HFCs); increased oversight of imports; creation of a comprehensive certification ID tracking system; robust recordkeeping and reporting; independent third-party auditing; and data transparency. We further urge EPA to coordinate with states that have already enacted HFC laws to promote consistency and efficiency in implementing these important requirements.

To ensure meaningful reductions and further deter any would-be violators, EPA should also expand the list of circumstances warranting administrative consequences in the Proposed Rule, 86 Fed. Reg. at 27,185–86, and prohibit allocation of allowances to, or require enhanced monitoring and reporting by, entities that have previously underreported HFC production or consumption under EPA's Greenhouse Gas Reporting Program or underreported chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) production or consumption under the Ozone Depleting Substance Phaseout. EPA should also prohibit HFC stockpiling and require that all attestations be made under penalty of perjury. Further, if EPA revokes an entity's allowances, EPA should not remove that entity from the HFC allocation system. Instead, EPA should render the entity "inactive," specifying that the entity is not eligible for allocations due to unlawful activity, to develop a permanent record of revocation status and ensure such entities cannot simply reapply for an allocation.

Finally, EPA's final rule should evaluate, and take appropriate steps to mitigate, any supply chain risk for HFC substitutes. Notably, several of the undersigned States have observed non-compliance with state HFC-reduction programs attributed to HFC-substitute supply chain shortages due to recent events. EPA should ensure that any such shortages do not threaten the emissions reductions to be achieved under its HFC phasedown program.

IV. EPA Should Use the Most Stringent Criteria for Evaluating Application-Specific Allowance Requests, Review Multiple Factors, and Create Strong Incentives for Companies to Submit Truthful Information.

The States and the City of New York urge EPA to adopt stringent criteria for evaluating application-specific allowance requests for statutorily identified end users, to review multiple, comprehensive factors in evaluating such requests, and to impose significant consequences on entities that submit false information in such requests.

EPA is considering two sets of criteria for evaluating application-specific allowances: (1) HFC use by the company in that application in the prior year multiplied by the average

growth rate of use for the company over the past three years; or (2) HFC use by the company in that application in the prior year multiplied by the average growth rate of use by *all* companies requesting that type of application-specific allowances over the past three years. We urge EPA to utilize the allowance criteria that would result in the most stringent standard and lowest number of allowances to ensure that the statutory "essential use" designation does not eliminate or unduly mitigate the incentive to identify or develop viable alternatives and render technology growth stagnant in each specified area.

EPA is also seeking comment on whether the gross domestic product or U.S. population growth would be appropriate for each application or whether EPA should consider individual circumstances that are factually documented, as well as the availability of reclaim, inventory of previously produced and imported HFCs, availability of alternatives, or "other" relevant features. *See* 86 Fed. Reg. at 27,174. EPA should consider all of the above factors, as one factor alone may not adequately reflect the entirety of circumstances relevant to a particular application.

Finally, EPA also proposes that where a company provides false information in an application-specific allowance request, EPA has the right to revoke allowances, require future retirement of allowances at a greater level than the number of application-specific allowances allocated, prohibit companies from receiving future allowances if there is noncompliance with relevant legal and regulatory requirements, or pursue any other appropriate enforcement action. *See* 86 Fed. Reg. at 27,175. EPA should clarify that a company submitting false data to EPA is also subject to criminal liability. Furthermore, EPA should make clear that it can prohibit companies providing false information from receiving future allowances regardless of whether "there is noncompliance with relevant legal and regulatory requirements." *Id.* at 27,175. Submission of false information should, on its own, prevent future allocations to ensure the consequences of providing false information are greater than the benefit created by deceit.

V. EPA Should Consider the Social Cost of HFC Emissions in Assessing the Benefits of the Proposed Rule.

The States and the City of New York support EPA's use of estimated values of the social cost of HFC emissions (SC-HFC) to evaluate the benefits of the Proposed Rule. *See* 86 Fed. Reg. at 27,202. The SC-HFC is a range of estimates, in dollars, of the long-term harm caused by emitting one additional ton of HFCs in a given year. We agree with EPA that "[t]he SC-HFC is the theoretically appropriate value to use in conducting benefit-cost analyses of policies that affect HFC emissions." *Id.* Consideration of the SC-HFC is also consistent with Section 5(a) of Executive Order No. 13,990, which declares "it is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account," and with President Biden's Memorandum directing all agencies "to make evidence-based decisions guided by the best available science and data," which include the SC-HFC.[26] And consideration of the SC-HFC is also important to satisfy EPA's legal responsibility to evaluate the data relevant to its decision making and articulate a rational basis for its policy

[26] *Presidential Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking* (Jan. 27, 2021), https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/.

choices. *See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983); *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1203 (9th Cir. 2008) (Department of Transportation's failure to monetize climate benefits in its assessment of fuel efficiency standards was arbitrary and capricious). We thus urge EPA to employ the SC-HFC in evaluating the benefits of its final rule.

CONCLUSION

The States and the City of New York appreciate EPA's attention to the urgency of the climate crisis by proposing swift action to minimize emissions of HFCs in accordance with the AIM Act. As EPA finalizes and implements its HFC phasedown program, we urge EPA to consider the above concerns and recommendations. And going forward, we request that EPA continue to evaluate all opportunities within its statutory authority to build on the success of State regulatory programs and secure critical reductions in emissions of HFCs and other short-lived climate pollutants.

Respectfully submitted,

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