

February 10, 2023

RE: Renewable Fuel Standard Program: Standards for 2023–2025 and Other Changes  
Docket ID No. EPA-HQ-OAR-2021-0427

Dear Administrator Regan:

You rightly began your tenure by echoing President Biden's pledge to center environmental justice in climate policy. The undersigned group of organizations are writing because we believe that EPA's proposal to expand the Renewable Fuel Standard with incentives for charging electric vehicles with factory farm gas and landfill gas runs directly counter to this commitment. These dirty biofuels are causing significant environmental and health harms on surrounding communities, which are disproportionately low-income communities and communities of color. We strongly urge you to reconsider EPA's proposed RFS rule and not expand the market for dirty fuels.

*Climate Interventions Must Not Harm Communities*

The massive climate impact of our transportation, food, and energy systems are rightfully under increasing scrutiny. However, we cannot move towards more sustainable systems without ensuring that our climate interventions do not exacerbate harm to communities, such as by increasing co-pollutants, harming rural economies, or lowering property values. In the draft proposal, EPA makes a deeply flawed assertion that RFS electrification pathways will benefit environmental justice communities because the purported decrease in GHG emissions will reduce air pollution that disproportionately harms BIPOC communities.<sup>1</sup> In fact, the Renewable Fuel Standard has been a proven driver of increased GHG emissions,<sup>2</sup> and expanding the program to include EV charging will exacerbate this failure. Proposed electrification pathways would operate as an offsets program that will further concentrate pollution hotspots in already overburdened communities.

Factory farms emit harmful concentrations of ammonia, hydrogen sulfide, and volatile organic compounds, which are ozone and PM2.5 precursors and are causing respiratory illnesses, as well as nausea, headaches, and other health conditions in surrounding communities.<sup>3</sup> Merely living in proximity to a factory farm has been demonstrated to decrease life expectancy.<sup>4</sup> The inclusion of anaerobic digesters for manure can exacerbate pollution, as it incentivizes higher concentration

---

<sup>1</sup> Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes, 87 Fed. Reg. 80,582, 80,585-86 (Dec. 30, 2022).

<sup>2</sup> Tyler J. Lark et al., *Environmental Outcomes of the US Renewable Fuel Standard*, 119 PNAS (Feb. 14, 2022), <https://doi.org/10.1073/pnas.2101084119>; John M. DeCicco et al., *Carbon Balance Effects of U.S. Biofuel Production and Use*, 138 Climatic Change 667 (2016), <https://doi.org/10.1007/s10584-016-1764-4>.

<sup>3</sup> NALBOH, *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities* 5-7 (2010), [https://www.cdc.gov/nceh/ehs/docs/understanding\\_cafos\\_nalboh.pdf](https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf).

<sup>4</sup> See, e.g., Julia Kravchenko et al., *Mortality and Health Outcomes in North Carolina Communities Located in Close Proximity to Hog Concentrated Animal Feeding Operations*, 79 N.C. Med. J. 279, <https://doi.org/10.18043/ncm.79.5.278>.

of herds in order to maximize biogas production and sales.<sup>5</sup> This so-called “biogas” is generated by collecting manure in football field-sized lagoons, containing high concentrations of nitrogen, phosphorus, pathogens, and heavy metals.<sup>6</sup> The process can increase ammonia and nitrous oxide emissions and make the nitrogen more water soluble, which increases the likelihood of groundwater contamination from seepage.<sup>7</sup>

Landfills create similar environmental justice concerns, exposing communities to toxic and cancerous pollutants. Leachate can carry nitrate, phosphate, ammonium, and oxides into groundwater.<sup>8</sup> Numerous studies have demonstrated that communities near landfills have higher risk of cancer and congenital issues.<sup>9</sup> Further, proximity to a landfill keeps property value low, perpetuating cycles of economic inequality.<sup>10</sup> Monetizing landfill gas creates the perverse incentive to increase the amount of organic waste in landfills (and therefore demand for additional landfill space), embedding subsequent pollution rather than addressing the root cause.

The proposed rule expresses an explicit intent by EPA for the existing electrification pathways to incentivize an expansion of factory farm and landfill gas production.<sup>11</sup> These industries are drivers of pollution and harm, and should not be subsidized in the name of ‘clean’ fuel. Expanding the Renewable Fuel Standard to include EV charging would be an environmental justice disaster.

### *Monetizing Pollution Undermines Efforts to Minimize Pollution*

Factory farms and landfills are huge sources of pollution, and increasing attention has been paid to their climate impact. However, rather than encourage less emission-intensive practices, such as pasturing livestock or reducing organic waste in landfills, climate interventions have largely swung in the opposite direction – commodifying methane biogas under state and federal schemes. Unsurprisingly, this has backfired.

Methane biogas benefits from substantial subsidies under the presumption that it is a solution to the GHG emissions from landfills and factory farms. Advocates claim that capturing concentrated

---

<sup>5</sup> See, e.g., Food & Water Watch, *Biogas From Factory Waste Has No Place In A Clean Energy Future 2* (July 2019), [https://www.foodandwaterwatch.org/wp-content/uploads/2021/03/ib\\_1906\\_biogas\\_manure-2019-web.pdf](https://www.foodandwaterwatch.org/wp-content/uploads/2021/03/ib_1906_biogas_manure-2019-web.pdf) (describing how Smithfield Foods planned to build “new factory farms specifically to tap into the potential to generate biogas”).

<sup>6</sup> JoAnn Burkholder et al., *Impacts of Waste From Concentrated Animal Feeding Operations*, 115 *Env’t Health Perspectives* 308 (Feb. 2007), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1817674/>.

<sup>7</sup> Michael A. Holley et al., *Greenhouse Gas and Ammonia Emissions From Digested and Separated Dairy Manure During Storage and After Land Application*, 239 *Ag., Ecosystems, & Env’t* 410 (Feb. 15, 2017), <https://www.sciencedirect.com/science/article/pii/S0167880917300701>.

<sup>8</sup> Maheshi Danthurebandara et al., *Environmental and Socio-Economic Impacts of Landfills* (2013), [https://www.researchgate.net/publication/278738702\\_Environmental\\_and\\_socio-economic\\_impacts\\_of\\_landfills](https://www.researchgate.net/publication/278738702_Environmental_and_socio-economic_impacts_of_landfills).

<sup>9</sup> *Id.*

<sup>10</sup> Paul Mohai et al., *Which Came First, People or Pollution? Assessing the Disparate Siting and Post-Siting Demographic Change Hypotheses of Environmental Justice*, 10 *Env’t Res. Lett.* (2015), <https://iopscience.iop.org/article/10.1088/1748-9326/10/11/115008/pdf>.

<sup>11</sup> See, e.g., 87 *Fed. Reg.* at 80,592 (“By 2026 ... we expect additional generating capacity to come online to take advantage of the new e-RIN market.”).

methane biogas is better than allowing unhindered emissions. However, this relies on a false assumption that methane emissions are an unintended byproduct, rather than a lucrative byproduct that is driving producers' decisions to expand their operations.<sup>12</sup>

Incentives for methane biogas create a clear perverse incentive to monetize rather than minimize pollution. Landfill operators are encouraged to abandon best practices that would minimize pollutants – leaving landfills uncovered for years to increase moisture and thereby boost the energy value of the collected gas, but also increasing the amount of gas entering our atmosphere.<sup>13</sup>

Large-scale factory farms are rewarded for increased herd size and concentration, which will lead to increased methane emissions and more corporate consolidation.<sup>14</sup> Further, because the EPA has declined to use its authority under the Clean Air and Clean Water Acts to regulate factory farms and state-level regulations of factory farm emissions are minimal, there is no mechanism to support monitoring of leakage from anaerobic digesters and implementation of best available technologies to mitigate co-pollutants and prevent ground and surface water contamination.<sup>15</sup>

Many states, tribes, and local communities are doing important work to minimize the amount of organic waste in landfills.<sup>16 17 18</sup> Livestock can be pastured and kept in less concentrated

---

<sup>12</sup> Aaron Smith, *The Dairy Cow Manure Gold Rush*, Ag Data News (Feb. 2, 2022), <https://asmith.ucdavis.edu/news/revisiting-value-dairy-cow-manure>; Michael McCully, *Energy Revenue Could be a Game Changer for Dairy Farms*, Hoard's Dairyman (Sept. 3, 2021), <https://hoards.com/article-30925-energy-revenue-could-be-a-game-changer-for-dairy-farms.html>.

<sup>13</sup> Sierra Club, Report on Landfill-Gas-to-Energy (Jan. 5, 2010), <https://www.sierraclub.org/sites/www.sierraclub.org/files/landfill-gas-report.pdf>; IPCC, Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007, ch. 10.4.2, [https://archive.ipcc.ch/publications\\_and\\_data/ar4/wg3/en/ch10s10-4-2.html](https://archive.ipcc.ch/publications_and_data/ar4/wg3/en/ch10s10-4-2.html).

<sup>14</sup> AgSTAR, Market Opportunities for Biogas Recovery Systems at U.S. Livestock Facilities (June 2018), <https://www.epa.gov/sites/default/files/2018-06/documents/epa430r18006agstarmarketreport2018.pdf> (finding that “positive financial returns” are most likely for biogas systems with over 500 cows or 2,000 swine).

<sup>15</sup> See Earthjustice et al., Petition to Adopt a Rebuttable Presumption That Large CAFOs Using Wet Manure Management Systems Actually Discharge Pollutants Under the Clean Water Act 41 (Oct. 2022), [https://earthjustice.org/sites/default/files/files/cafo\\_presumptionpetition\\_withexhibits\\_oct2022\\_.pdf](https://earthjustice.org/sites/default/files/files/cafo_presumptionpetition_withexhibits_oct2022_.pdf); ALDF et al., Petition to Rescind the Air Agreement and Enforce Clean Air Laws Against Animal Feeding Operations (Oct. 26, 2021), [https://www.biologicaldiversity.org/campaigns/industrial\\_animal\\_agriculture/pdfs/2021-10-26-Petition-re-2005-Air-Consent-Agreement.pdf](https://www.biologicaldiversity.org/campaigns/industrial_animal_agriculture/pdfs/2021-10-26-Petition-re-2005-Air-Consent-Agreement.pdf).

<sup>16</sup> EPA *Reducing the Impact of Wasted Food by Feeding the soil and composting* <https://www.epa.gov/sustainable-management-food/reducing-impact-wasted-food-feeding-soil-and-composting>

<sup>17</sup> John D. Long, *Composting Operations at Cherokee Tribal Facilities* [https://www.fao.org/fileadmin/user\\_upload/nr/sustainability\\_pathways/docs/COMPOSTING%20OPERATIONS%20AT%20CHEROKEE%20TRIBE.pdf](https://www.fao.org/fileadmin/user_upload/nr/sustainability_pathways/docs/COMPOSTING%20OPERATIONS%20AT%20CHEROKEE%20TRIBE.pdf)

<sup>18</sup> Arlene Karidis, Prince George's County, Md., Ramps up Composting with Major Expansion (August 2018) <https://www.waste360.com/composting/prince-george-s-county-md-ramps-composting-major-expansion>

conditions.<sup>19</sup> But massive subsidies for methane biogas effectively penalize these more sustainable practices that would actually decrease the amount of pollution at the source.

### *Electrification Pathways are a Slippery Slope*

As the transportation sector continues to electrify, it is unlikely that factory farm and landfill biogas will be able to meet the growing charging demand. Industry has made it clear that their next envisioned step will be a pathway for solid fuels such as woody biomass and municipal solid waste. This pathway, like those for factory farm and landfill gas, would be fundamentally incompatible with environmental justice and climate commitments.

The woody biomass industry is toxic to communities at every stage, from procurement to combustion.<sup>20</sup> The wood pellet industry releases tons of particulate matter, nitrogen oxides, carbon monoxide, and volatile organic compounds into surrounding communities and power plants burning woody biomass emit high levels of criteria and hazardous air pollutants, including ozone and PM<sub>2.5</sub> precursors.<sup>21</sup> This fine particulate matter can enter the lungs and bloodstream of residents of nearby communities, causing heart attacks, decreased lung function, worsening asthma, and premature death.<sup>22</sup> Both biomass power plants and garbage incinerators, which are even more polluting, are disproportionately sited in low-income communities and communities of color.<sup>23</sup> In order to protect our climate, improve air quality, and advance environmental justice, these facilities need to be retired, not incentivized.

Although it should be clear that burning our forests for energy is neither 'clean' nor 'renewable' - the woody biomass industry has long benefited from fictitious climate claims. Timber advocates claim that burning wood is carbon neutral and have successfully attached riders to must-pass budget bills that require federal agencies to accept this claim.<sup>24</sup> In fact, burning wood for energy

---

<sup>19</sup> See, e.g., Peter Lehner et al., Legal Pathways to Carbon-Neutral Agriculture, 47 *Env't L. rep.* 10,845, 10,856 (2017); Paul Jun et al., CH<sub>4</sub> and N<sub>2</sub>O Emissions From Livestock Manure, in *Nat'l Greenhouse Gas Inventories Programme, IPCC, Background Papers 322* (2002), [https://www.ipcc-nggip.iges.or.jp/public/gp/bgp/4\\_2\\_CH4\\_and\\_N2O\\_Livestock\\_Manure.pdf](https://www.ipcc-nggip.iges.or.jp/public/gp/bgp/4_2_CH4_and_N2O_Livestock_Manure.pdf).

<sup>20</sup> EIP, Toxic Deception: How the Wood Biomass Industry Skirts the Clean Air Act (Apr. 26, 2018), <https://www.sec.gov/rules/petitions/2019/ptn4-741-exc.pdf>.

<sup>21</sup> Kelly Bitov et al., Climate of Deception: Why Electricity Consumers Who Care About Global Warming and Air Pollution Need FTC Protection From Biomass Industry Greenwashing, PFPI (2014), <http://www.pfpi.net/wp-content/uploads/2014/07/PFPI-report-to-FTC-on-biomass-power-greenwashing.pdf>; Jonathan J. Buonocore et al., A Decade of the U.S. Energy Mix Transitioning Away From Coal: Historical Reconstruction of the Reductions in the Public Health Burden of Energy, 16 *Env't Res. Lett.* (2021), <https://iopscience.iop.org/article/10.1088/1748-9326/abe74c>.

<sup>22</sup> *Health and Environmental Effects of Particulate Matter*, EPA, <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>; *Health Effects of Ozone Pollution*, EPA, <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>.

<sup>23</sup> Ana I. Baptista et al., U.S. Municipal Solid Waste Incinerators: An Industry in Decline, Tishman Environment & Design Center 4 (May 2019), [https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bea0d59ad00012d220e/1566329840732/CR\\_GaiaReportFinal\\_05.21.pdf](https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bea0d59ad00012d220e/1566329840732/CR_GaiaReportFinal_05.21.pdf).

<sup>24</sup> Marc Heller, 'Carbon Neutral' Scores Another Victory in Omnibus, *E&E Daily* (Dec. 22, 2022), <https://www.eenews.net/articles/carbon-neutral-scores-another-victory-in-omnibus/>.

is actually dirtier than even coal.<sup>25</sup> Despite industry claims that they operate sustainably by using forest residue and waste, it is an open secret that industry is processing whole trees for wood pellet production.<sup>26</sup> Even if logged trees are replanted, the carbon released by burning forests for fuel can take over a century to be reabsorbed - an unhelpful timeline as we need to rein in emissions within the decade.<sup>27</sup>

We urge the EPA not to double-down on the failing Renewable Fuel Standard program. Any implementation of new or existing electrification pathways would dramatically undercut efforts to address the climate and pollution harms of our transportation and energy sectors while exacerbating the harms of industrial agriculture and waste disposal on at-risk communities.

### *RFS e-RINs are Antithetical to Clean Transportation*

Electrifying transportation is a crucial step in eliminating our reliance on fossil fuels. This Administration has already taken several important steps to support EV expansion. However, the Renewable Fuel Standard is not the correct mechanism to support EVs, as the program only covers biogas and excludes truly renewable energy like wind and solar. EVs are only as clean as the electricity charging them, so meaningfully decreasing transportation emissions requires aggressively increasing our renewable capacity, not subsidizing dirty and harmful energy sources. Incentives to electrify our transportation sector must not embed the same environmental injustices of our current fossil fuel regime.

Expanding the RFS to include electricity will further incentivize harmful environmental practices by making it cheaper for biogas producers to participate in the RFS. Currently, to earn RFS credits, methane biogas from factory farms and landfills must be treated and transported to fossil gas pipelines that move the product into the interstate market.<sup>28</sup> EPA acknowledges that this requires “significant capital investment.”<sup>29</sup> In contrast, e-RINs allow any factory farm or landfill with an electrical connection to participate in the RFS, which is a “far less expensive and more readily available option.”<sup>30</sup> The electrification pathways make it cheaper for factory farms and landfills to monetize their waste as biogas – encouraging increased production of biogas through anaerobic digesters rather than responsible waste management. EPA’s proposal is problematically intended to encourage the development of even more methane biogas than is currently produced. The plan caps e-RINs at the lesser of projected electricity demand from EVs

---

<sup>25</sup> John D. Sterman et al., *Does Replacing Coal With Wood Lower CO2 Emissions? Dynamic Lifecycle Analysis of Wood Bioenergy*, 13 *Enviro. Res. Lett.* (Jan. 18, 2018), <https://iopscience.iop.org/article/10.1088/1748-9326/aaa512/meta>.

<sup>26</sup> Jonathan Vigliotti, *Wood Pellets May Not Actually Be Green Renewable Energy Source, Critics Say*, CBS (Apr. 22, 2022), <https://www.cbsnews.com/video/wood-pellets-may-not-actually-be-green-renewable-energy-source-critics-say/#x>; Joby Warrick, *How Europe’s Climate Policies Led to More U.S. Trees Being Cut Down*, Wash. Post (June 2, 2015), [https://www.washingtonpost.com/national/health-science/how-europes-climate-policies-have-led-to-more-trees-cut-down-in-the-us/2015/06/01/ab1a2d9e-060e-11e5-bc72-f3e16bf50bb6\\_story.html](https://www.washingtonpost.com/national/health-science/how-europes-climate-policies-have-led-to-more-trees-cut-down-in-the-us/2015/06/01/ab1a2d9e-060e-11e5-bc72-f3e16bf50bb6_story.html).

<sup>27</sup> Sterman, *supra* note 22.

<sup>28</sup> 87 Fed. Reg. at 80,593.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.* at 80,594.

or projected production of biogas.<sup>31</sup> As EV deployment increases, EV electricity demand will likely surpass current biogas availability. Thus, the rule actively promotes increased biogas production to meet higher electricity demand<sup>32</sup> and is a slippery slope to qualify additional harmful pathways, such as woody biomass and trash incineration, to meet growing EV demand.<sup>33</sup>

The proposed rule further exacerbates the market distortion favoring environmental harms by allowing for double counting credits for biofuels in the federal e-RIN and other credit programs. The EPA states that it does “not intend the proposed e-RIN program to limit or preclude renewable electricity generators from participation in other state or local programs ... or to also claim environmental benefits under such other programs.”<sup>34</sup> The rule explicitly contemplates “stacking credits,” where “a renewable electricity generator located in a state with a renewable portfolio standard (RPS) that allows for renewable electricity credits (RECs) for biogas generated electricity may continue to generate RECs in addition to entering into RIN generation agreements.”<sup>35</sup> As discussed above, the justification for this proposal centers on the false premise that e-RINs for biogas provide “environmental benefits” that should be incentivized.<sup>36</sup> However, under any logical program, the same purported environmental attributes of the gas cannot rationally be commodified more than once. Allowing biogas generators to receive multiple credits for the same dirty electricity generation in both state and federal programs allows factory farms and landfills to collect twice for the environmentally harmful practices described above. By allowing stacked financial incentives to generate biogas, the e-RINs proposal encourages powering the EV fleet with dirty energy, over the use of sources which preserve the intended climate and environmental benefits of EVs, such as wind and solar.

It is clear that expanding the Renewable Fuel Standard to include EV charging is not compatible with environmental justice commitments nor climate goals. This Administration's support for expanding EV adoption and access must not come at expense of communities already overburdened with pollution. We therefore urge the EPA to not move forward with any implementation of the RFS electrification pathways.

Sincerely,

The undersigned organizations:

---

<sup>31</sup> Id.

<sup>32</sup> The EPA recognizes this in stating that “[f]or 2024 and 2025 the electricity demanded by the EV fleet would be the limiting factor, however, this is likely to flip in future years.” Id.

<sup>33</sup> Anna Simet, *A Foot in the Door*, Biomass Magazine (January 2023)

<https://biomassmagazine.com/articles/19643/a-foot-in-the-door>

<sup>34</sup> 87 Fed. Reg. at 80,654.

<sup>35</sup> Id.

<sup>36</sup> Id.

350 Humboldt  
350 Triangle  
A Well-Fed World  
Accelerate Neighborhood Climate Action  
ActionAid USA  
American Society for the Prevention of  
Cruelty to Animals (ASPCA)  
Animals Are Sentient Beings Inc  
Beyond Extreme Energy  
Biofuelwatch  
Businesses for a Livable Climate

Butte County Local Food Network  
Call to Action Colorado  
CatholicNetwork US  
Center for Food Safety  
Church Women United in New York State  
Citizen's Alliance for a Sustainable  
Englewood  
CO Businesses for a Livable Climate  
Coalition Against Pilgrim Pipeline - NJ  
Coalition of Community Organizations  
Community for Sustainable Energy

Dogwood Alliance  
Don't Gas the Meadowlands Coalition  
Earth Ethics, Inc.  
EJCAN  
Extinction Rebellion San Francisco Bay  
Area  
Fair Start Movement  
Farm Forward  
Food Animal Concerns Trust  
Fox Valley Citizens for Peace & Justice  
Friends of the Earth

GMO/Toxin Free USA  
Greater New Orleans Housing Alliance  
Green America  
Health Care Without Harm  
Honor the Earth  
I-70 Citizens Advisory Group  
Indivisible Ambassadors  
Institute for Agriculture and Trade Policy

Larimer Alliance for Health, Safety and  
Environment  
Leadership Counsel for Justice &  
Accountability

Littleton Business Alliance  
Mayfair Park Neighborhood Association  
Board  
Mental Health & Inclusion Ministries  
Mercy For Animals  
Milwaukee Riverkeeper  
Missouri Coalition for the Environment  
Montbello Neighborhood Improvement  
Association  
Non-GMO Project  
North American Climate, Conservation and  
Environment (NACCE)  
North Carolina Environmental Justice  
Network

North Range Concerned Citizens  
NYCLASS (New Yorkers for Clean, Livable,  
and Safe Streets)  
Oil & Gas Action Network  
Rachel Carson Council  
RapidShift Network  
River Guardian Foundation  
Robeson County Cooperative for  
Sustainable Development  
San Francisco Bay Physicians for Social  
Responsibility  
Santa Cruz Climate Action Network  
Save EPA (former employees)

Sierra Club  
Small Business Alliance  
Socially Responsible Agriculture Project  
Southern Oregon Climate Action Now  
Southwest Organization for Sustainability  
Spirit of the Sun, Inc.  
Stop the Algonquin Pipeline Expansion  
System Change Not Climate Change  
Terra Advocati  
The Green House Connection Center

The Raven Corps  
Third Act RVA  
Transformations CDC  
Unitarian Universalist Environmental Justice  
Ministry  
Unite North Metro Denver

Wall of Women  
Waterkeeper Alliance  
West End Revitalization Association WERA  
Western Slope Businesses for a Livable  
Climate  
Womxn from the Mountain  
Working for Racial Equity