

## Industrial Animal Agriculture Impacts on Environmental Justice and the Need for Federal Oversight

The vast majority of the roughly 10 billion farm animals slaughtered for food each year in the U.S are raised in confinement in industrial facilities known as concentrated animal feeding operations (CAFOs).<sup>1</sup> Also known as factory farms, these heavily polluting facilities threaten rural economies, public health, and quality of life for the communities in which they are located, which are disproportionately communities of color and low-wealth communities. Industrial animal agriculture operations are also a major driver of the climate crisis, accounting for nearly 60% of emissions from the global food system, 36% of total U.S. methane emissions, and 5% of nitrous oxide emissions.<sup>2</sup> According to the EPA, there are more than 20,000 CAFOs operating in the US.<sup>3</sup>

Despite ample science demonstrating the major role industrial animal agriculture plays in contributing to climate change, water pollution, air pollution, and adverse impacts to public health,<sup>4</sup> the industry has largely been able to avoid even basic federal oversight. The Environmental Protection Agency (EPA) has a duty and the authority to protect the health and well-being of our communities and the environment by enforcing federal environmental protection laws like the Clean Air Act and Clean Water Act, but it has so far neglected to do so for industrial agriculture.

EPA's failure to protect communities from climate warming and toxic air and water pollutants generated by factory farms undermines the agency's stated commitment to science as well as to justice and equity.

### Industrial animal agriculture's health impacts on environmental justice & rural communities

Today's industrial-scale farms generate mountains of manure—as much as 1 billion tons, more than three times as much waste as humans.<sup>5</sup> North Carolina alone generates almost 10 billion gallons of animal waste per year.<sup>6</sup> The

waste, which is often stored in giant manure pits and periodically applied to spray fields, can contain pathogens, antibiotic-resistant bacteria, and heavy metals. The excessive nitrates and phosphorous in the spray from land application of manure can, and often does, reach nearby homes and drinking water sources.<sup>7</sup>

The odor plumes, which often pervade nearby communities, contain respiratory and eye irritants including hydrogen sulfide and ammonia.<sup>8</sup> Both substances are associated with a variety of respiratory issues at certain levels, and studies have found consistent correlations between communities' proximity to CAFOs and asthma, chronic obstructive pulmonary disease, and other serious health issues.<sup>9</sup> One study published in 2021 found approximately 12,700 deaths per year from air pollution in the U.S. are attributable to industrial livestock production.<sup>10</sup> That is more deaths than occur from pollution from coal plants. Yet industrial livestock remains largely unregulated.

A growing body of research suggests these emissions may contribute not only to respiratory ailments in nearby residents but also decreased quality of life, mental stress, and elevated blood pressure.<sup>11</sup> All of these negative impacts disproportionately affect low-income communities and communities of color because of where factory farms operate. Research has



Photo: Rick Dove, Waterkeeper Alliance (Oct 11, 2016)

shown a disproportionately high concentration of CAFOs in communities of color despite the declining number of farmers of color in the southeastern United States.<sup>12</sup>

This is targeted and intentional as multinational meatpacking giants control nearly every aspect of factory farming including the location of slaughter facilities and the surrounding concentration of factory farms.

*“These pigs are producing about 19 million tons of animal waste on an annual basis. It’s going into our rivers and streams. It sits out in the air openly until they decide to irrigate it. They irrigate this waste out around the fields and crops. They call it organic fertilizer and say that there was no harm to it. But the problem is that it has all kinds of toxic chemicals. Hydrogen sulfide comes off the lagoons and it’s making people in the community sick. As an organizer, I’ve been working with these communities since the early 2000s. People say they get sick, nauseated, you get headaches and you get angry and frustrated living like that. People don’t go outside anymore.”*

- Naeema Muhammad, North Carolina  
Environmental Justice Network

## Industrial animal agriculture drives climate change

Animal agriculture is a major contributor to greenhouse gas (GHG) emissions and is a leading cause of water and air pollution.<sup>13</sup> EPA estimates 36% of methane emissions are attributable to animal agriculture, which is greater than the methane emissions from natural gas and petroleum.<sup>14</sup> Focusing on methane reduction is crucial in the climate fight given that it is 80 times as potent as carbon dioxide over a 20-year period. Because it is a short-lived pollutant that lasts only 12 years in the atmosphere, reducing its production could yield immediate climate benefits.<sup>15</sup> Further, recent EPA data shows that while overall methane emissions have declined 16.6% since 1990, agriculture-related methane emissions rose by 7.2% since 1990.

President Biden’s methane plan for agriculture relies heavily on the voluntary adoption of methane digesters to reduce emissions from

livestock manure management.<sup>16</sup> Paying corporations to continue polluting is not the solution to curbing air and water pollution. In fact, increased subsidization of these projects may have the opposite effect by driving expansion of factory farm operations and clustering in already overburdened areas to maximize profit. This expansion will create even more pollution for communities of color, especially since digesters do nothing to mitigate co-pollutants like nitrous oxide, ammonia, and heavy metals.<sup>17</sup> We have seen this happen already in places with a lot of methane digesters, such as in California’s central valley.<sup>18</sup>

Climate change disproportionately affects communities of color, low-income communities, and other vulnerable populations, because these communities are more likely to live in isolated rural areas, floodplains, coastlines, and other at-risk locations, making them at risk of exposure to adverse climate change impacts.<sup>19</sup> EPA has acknowledged that climate change exacerbates existing pollution problems and environmental stressors impacting the land, air, water, and the people who depend on them.<sup>20</sup>

If the EPA is serious about its commitment to advancing principles of equity and EJ, it must act now by exercising its oversight authority on the corporate-controlled industrial animal agriculture sector.

## EPA has existing authority to rein in the harm to communities and the climate from factory farms

Many of our bedrock environmental protection laws—such as the Clean Air and Clean Water Acts—already authorize EPA to oversee emissions and discharges from factory farms, but EPA has consistently exempted industrial agriculture from standards meant to protect communities from industrial pollution. Congress has granted EPA the authority to protect the public from harmful pollution,<sup>21</sup> yet industrial animal agriculture has used its unprecedented influence to profit from EPA’s failure to fulfill its role of federal oversight, resulting in an ever-expanding industry that continues to degrade already overburdened communities. By neglecting to enforce these environmental laws against factory farms, the EPA has yielded to the livestock industry’s immense political power at the expense of public health and EJ communities.

## Endnotes

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- 21 See 42 U.S.C. 7401(c), (stating that "a primary goal of this subchapter is to encourage or otherwise promote reasonable Federal, State, and local governmental actions. . . for pollution prevention."); See also Environmental Protection Agency, Clean Water Act and Federal Facilities, Summary, available at [https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities#:-:text=The%20CWA%20aims%20to%20prevent,CWA%20section%20101\(a\),](https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities#:-:text=The%20CWA%20aims%20to%20prevent,CWA%20section%20101(a),) (providing "[t]he CWA aims to prevent, reduce, and eliminate pollution in the nation's water. . .").