

AMERICAN PUBLIC HEALTH ASSOCIATION CALLS FOR NATIONAL MORATORIUM ON NEW AND EXPANDING CONCENTRATED ANIMAL FEEDING OPERATIONS

In light of the wide-ranging negative health and environmental impacts associated with Concentrated Animal Feeding Operations (CAFOs), as well as serious social and environmental justice concerns, the American Public Health Association adopted a new policy resolution. The [Precautionary Moratorium on New and Expanding CAFOs](#) calls for federal, state and local governments, including public health agencies, to impose a national moratorium on new and expanding CAFOs until additional scientific data on the attendant risks to public health have been collected, uncertainties resolved, and 12 action steps outlined in the resolution have been taken.

This document contains information about the 12 action steps that must be met before the APHA's call for a moratorium will be lifted, and includes contexts, overviews of each action, and recommended policy changes.

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The Johns Hopkins Center for a Livable Future is an interdisciplinary academic center based within the Bloomberg School of Public Health's Department of Environmental Health and Engineering and is a leader in public health research, education, policy and advocacy that is dedicated to building a healthier, more equitable and resilient food system. The opinions expressed herein are our own and do not necessarily reflect the views of The Johns Hopkins University.

ACTION 1:

REQUIRING END OF ANTIBIOTIC USE IN HEALTHY ANIMALS

Action Step 1 requires:

The federal government brings the use of medically important antibiotics in US poultry and livestock production into compliance with the 2017 World Health Organization (WHO) recommendation that producers stop using these important medicines in healthy animals. Federal regulators end approval for such drug use in food-producing animals where disease has not been clinically diagnosed. This misguided practice is currently allowed and deemed “therapeutic” by the US Federal Food and Drug Administration (FDA).

Overview of antibiotic use in food animal production:

In 2017, the FDA’s Center for Veterinary Medicine (CVM) completed implementation of Guidance for Industry #213¹, a process begun in 2013 to (i) “transition antimicrobial drugs with importance in human medicine that are used in the feed or drinking water of food producing animals to veterinary oversight,” and (ii) “eliminate the use of these products in animals for production (e.g., growth promotion) purposes.”² As a result, medically important antibiotics may only be used in the drinking water of food-producing animals by prescription or in animal feed under a Veterinary Feed Directive.³ Both of these uses must be authorized by a licensed veterinarian. Antibiotics can no

longer be used for growth promotion purposes. Since 2017, CVM has outlined additional steps to support stewardship of medically important antibiotics in animals in a 5-year plan to be implemented during fiscal years 2019-2023.⁴ Objective 1.1 of this 5-year plan is to revise the GFI #213 use conditions to require that each medically important antimicrobial used in food-producing animals is linked to a specific etiologic agent and is labeled with an appropriately targeted duration of use. Furthermore, while GFI #213 brought all feed and drinking water uses of medically important antimicrobial drugs in food producing animals under the oversight of licensed veterinarians, a limited number of other dosage forms of these drugs (approx. 5% of all medically important antimicrobials), such as injectable products, remain on the market as over-the-counter products. The CVM plans to issue a strategy to bring these remaining drugs under veterinary oversight. The FDA guidance, given that it is a combination of mandated regulation and voluntary actions, has not reduced the use of antibiotics in food animal production in a consistent or dramatic way. FDA statistics indicate antibiotic use for food-producing animals in 2019 increased, reversing previous reductions.⁵

RECOMMENDED POLICY CHANGES

The federal government should bring the use of medically important antibiotics in US poultry and livestock production into compliance with the 2017 WHO recommendation that producers stop using antibiotics in healthy animals: WHO recommends an

overall reduction in the use of all classes of medically important antibiotics in food-producing animals, with complete restriction of these antibiotics for growth promotion and preemptive disease prevention. A healthy animal should only receive antibiotics if a

disease has been diagnosed in other animals in the same population. Antibiotic use is not the only way to prevent disease: There are safer alternatives for disease prevention in animals, including improved hygiene, better use of vaccinations, and changes in animal housing and husbandry practices.

When an antibiotic is determined to be necessary, WHO recommends that a sick animal be tested and the best antibiotic to treat the specific infection be selected. The antibiotic should be selected from those WHO has listed as being “least important” to human health, and not from those classified as “highest priority critically important,” because these high priority antibiotics are often the only option available to treat serious bacterial infections in people.

The federal government should also provide adequate resources to FDA’s Center for Veterinary Medicine, such that it can initiate the actions outlined in its 5-year plan to revise Guidance for Industry #213. The federal government must provide the necessary resources for CVM to research, issue, and implement a final strategy to:

- 1) Ensure that all medically important antimicrobial drugs used in the feed or drinking water of food-producing animals have an appropriately targeted duration of use, and
- 2) Bring all dosage forms (including injectables, intramammary, etc.) of medically important antimicrobial drugs approved for use in food-producing animals under prescription authorized by a licensed veterinarian.

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ACTION 2:

REQUIRING END OF CAFO EXEMPTIONS UNDER CERCLA AND EPCRA

Action Step 2 requires:

The federal government removes CAFO exemptions from the reporting of environmental emissions of hazardous materials under CERCLA and EPCRA reporting requirements.

Overview of CERCLA and EPCRA reporting requirements: The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Emergency Planning and Community Right-to-Know Act

(EPCRA) “require reporting of releases of hazardous substances that meet or exceed reportable quantities within a 24-hour period.”¹ As such, government officials and agencies can determine if there is a need to take action in order to respond to the public health threats of release into the community. Ammonia and hydrogen sulfide produced in CAFOs are classified as hazardous substances that require reporting, whether emitted into the air or discharged into water.

OVERVIEW OF THE CAFO EXEMPTIONS MENTIONED:

- ▶ **CERCLA:** In March of 2018, Title XI of Division S of the Omnibus Appropriations Bill signed into law contained the FARM Act (Fair Agricultural Reporting Method Act), which amended CERCLA section 103(e) to exempt air emissions from animal waste at a farm from reporting under CERCLA.² The EPA subsequently published a final rule to reflect these changes through EPA regulations.³
- ▶ **EPCRA:** In June of 2019, EPA Administrator Andrew R. Wheeler signed a final rule

to amend the emergency release notification regulations under EPCRA that creates a reporting exemption for air emissions from farm animal waste.⁴ The rule is based on the FARM Act and EPA’s interpretation of the interplay between CERCLA’s and EPCRA’s reporting requirements. Groups have challenged the rule in court, arguing EPCRA continues to require reporting despite the FARM Act.

RECOMMENDED POLICY CHANGES

- ▶ **CERCLA:** Repeal the FARM Act
- ▶ **EPCRA:** Repeal the 2019 EPA exemption rule for air emissions from animal waste at farms and enact a new rule strengthening reporting requirements (to include measures such as requiring more frequent reporting under EPCRA’s ‘continuous release’ reporting provisions)

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ACTION 3:

REQUIRING ENFORCEMENT OF THE CLEAN WATER ACT AS IT PERTAINS TO CAFOS

Action Step 3 requires:

The federal government enforces the Clean Water Act as it pertains to CAFOs.

CAFOs are a leading contributor of pollutants in lakes, rivers, and reservoirs in the United States.¹ These pollutants include nutrients such as nitrogen and phosphorus, as well as bacteria, organic matter, solids, salts, trace elements, and pharmaceuticals.²

Overview of the Clean Water Act as it pertains to

CAFOs: Farms classified as CAFOs are subject to National Pollutant Discharge Elimination System (NPDES) permitting under the Clean Water Act because they are usually “point sources” of pollution.³ Under the Clean Water Act, point sources are prohibited from discharging pollutants to US waters except as authorized by an NPDES permit. The Clean Water Act requirement specifies that only CAFOs that “discharge or propose to discharge” must get a NPDES permit. “Propose to discharge” means a CAFO is “designed, constructed, operated or maintained” in such a way that a discharge “will occur.”⁴ CAFOs that *do not*, or *do not intend to discharge* may still apply for a permit. Any unpermitted CAFO is subjected to significant Clean Water Act penalties if discharge occurs.⁵

All permitted CAFOs must submit a Nutrient Management Plan (NMP) as part of the permit application that is available for review by the public prior to incorporation into the facility’s final permit. CAFOs with permits must then submit annual reports that include, among other items, a description of (i) crops planted and yield from each field, (ii) the nitrogen

and phosphorus content of manure/wastewater that is applied to soil and the amount of manure/wastewater/chemical fertilizer applied to each field, and (iii) the total amount of plant-available nitrogen and phosphorous from all sources.⁵

The Environmental Protection Agency is responsible for administering the NPDES program. The EPA has the option to authorize states to implement and enforce federal environmental laws. Once a state is authorized to implement a federal law, it assumes the day to day responsibilities of running the federal program. However, the EPA has oversight to ensure that state programs conform to federal requirements. There are several methods the EPA and state authorities can use to monitor compliance with environmental regulations, including inspection, monitoring of permits, records, annual reports, and a CAFO’s self-disclosure of pollution.⁵

The EPA’s lack of oversight has contributed to inconsistent implementation of the Clean Water Act as it pertains to CAFOs. States vary widely in capacity and the philosophy that they bring to bear on their implementation responsibilities. This divergence among states is a significant source of inconsistency in the enforcement of the Clean Water Act as it pertains to CAFOs. Many states do not properly regulate issuance of NPDES permits.⁶ Federal laws allow states to have permitting requirements that are more stringent than federal laws, but not less.

RECOMMENDED POLICY CHANGES

The federal government should enforce the Clean Water Act as it pertains to CAFOs. This can be achieved through (i) more stringent permitting requirements, (ii) increasing the number of inspection and enforcement staff, which would allow more frequent inspection of CAFO facilities and stricter monitoring of permits, records, and reports, and (iii) stricter oversight by the Environmental Protection Agency of state programs to ensure that they conform to federal requirements.

The EPA should make the federal “floor” as protective as possible, such that state laws must be equally as stringent or more stringent than the federal law.⁷ Furthermore, state employees who enforce CAFO regulations and permits consistent with the Clean Water Act should receive extensive training by the EPA to ensure consistent enforcement.⁸

Even states with high numbers of animal feeding operations have very few resources dedicated to CAFO regulation. Permitting statutes should mandate fees to cover the costs of implementing and enforcing

NPDES permit requirements. The Clean Air Act, for example, mandates that EPA and state authorities assess fees to cover the costs of administering and enforcing the Title V permit program.⁶ The Clean Water Act should contain similar provisions. These fees should be used to increase the number of EPA inspection and enforcement staff.

To aid in the aforementioned changes, the EPA must work with other federal and state agencies to gather comprehensive data on large and medium-sized CAFOs.

Lastly, in addition to these recommendations for the government to enforce the Clean Water Act as it pertains to CAFOs, the following additional actions should be taken: (1) The EPA revise its interpretation of the Agricultural Stormwater Exemption to exclude CAFOs from the exemption; and, (2) the EPA consider co-permitting of integrators under the Clean Water Act, as they are owners of the animals on the facility and control the operations.

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ACTION 4:

REQUIRING STRENGTHENING CAFO REGULATIONS UNDER THE CLEAN AIR ACT

Action Step 4 requires:

The federal government strengthens CAFO regulation under the Clean Air Act by developing mechanisms to better monitor air emissions and collecting air emissions data to improve understanding of community exposure risks.

Overview of Clean Air Act air requirements: The Clean Air Act requires the Environmental Protection Agency to establish National Ambient Air Quality Standards (NAAQS) for designated Criteria Pollutants and requires states to adopt enforceable plans to achieve those standards.¹ But most Animal Feeding Operation air emissions of concern are not classified as Criteria Pollutants and therefore are not regulated by any federal AFO-specific standards under the Clean Air Act (CAA). AFOs that emit air pollutants in sufficient quantities can trigger CAA permit requirements, but AFOs have not been required to monitor their emissions and EPA has failed to establish credible emission factors for the industry, leaving these emissions unregulated.

RECOMMENDED POLICY CHANGES

The Environmental Protection Agency should finalize EEMs using all available peer-reviewed data, require AFOs to seek CAA permits if they emit above threshold amounts of pollutants according to the EEMs, and should reverse its rule exempting AFOs from reporting hazardous emissions. The EPA should concurrently conduct systematic planning for future development of a more comprehensive study or model to develop more accurate EEMs. It should develop this plan through a transparent process with input

Overview of National Air Emissions Monitoring Study:

In 2005, the EPA, AFO, and integrator representatives reached an agreement — the Air Compliance Agreement — in which the AFO sectors agreed to fund a monitoring study to provide data the EPA would use to develop emission estimating methodologies (EEMs) to determine whether individual AFOs are subject to CAA permit requirements or to hazardous air emissions reporting requirements.² However, this plan was strongly criticized by environmental advocates who contended that the agreement extended too many civil enforcement protections for AFOs, did not protect the monitoring program from industry influence, was negotiated behind closed doors and excluded independent experts. It was expected that the EPA would develop these EEMs by 2009 and AFOs would have to comply with applicable permitting requirements by 2010, but EPA's Science Advisory Board criticized EPA's initial draft EEMs soon after they were released and EPA has not since finalized them.

from expert stakeholders including researchers. This approach would provide a more accurate estimate of pollution created by the entire industry, compared with the Air Compliance Agreement's use of a small sample size of farms to generate data and create a statistical model.

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ACTION 5:

REQUIRING END OF LIQUID MANURE HANDLING SYSTEMS

Action Step 5 requires:

Federal and state governments prohibit the installation of new liquid manure handling systems, including waste lagoons, and phase out their use on existing operations in order to reduce the risk of public health and environmental disasters.

Overview of public health threats associated with CAFO liquid manure: CAFOs produce billions of tons of waste a year, at a rate far greater than can be absorbed by the land. This untreated waste is stored in “lagoons,” or cesspools, which pose serious public health and ecological hazards through contaminated surface and groundwater resources.¹ This form of waste management poses an exacerbated risk during times of heavy rainfall and extreme weather, which are becoming increasingly common. The constant and exacerbated exposure to CAFO waste is an environmen-

tal justice concern, as most surrounding communities are historically disadvantaged communities of color, whose occupants are disproportionately exposed to harmful pathogens, antibiotic-resistant bacteria and contaminated drinking water.

Although some groups have proposed solutions to waste lagoon contamination, such as lagoon covers and manure digesters,² these solutions do not prevent groundwater contamination, field spraying, or harmful odors.³ In addition, many of these “solutions” require significant financial investment and thus further support the adoption and continued use of unsustainable methods of industrial food animal production. More research is needed to test alternative waste management methods.

RECOMMENDED POLICY CHANGES

- ▶ The Environmental Protection Agency should utilize and enforce all regulatory standards necessary to prevent new lagoons from being built.
- ▶ Congress and Federal Agencies support research for sustainable alternatives to waste lagoons that are not vulnerable to breaches and that protect local communities and resources from contamination.
- ▶ Hold responsible the industries that own the animals, not the farmers or contractors, for waste management and the expenses related to phasing out existing lagoons.
- ▶ Encourage sustainable methods of animal production whose scale does not exceed the capacity of the land required to use the waste sustainably.⁴

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ACTION 6:

REQUIRING STRICT OVERSIGHT PROTOCOLS FOR THE APPLICATION OF DRY MANURE

Action Step 6 requires:

The federal and state governments apply the National Pollutant Discharge Elimination System (NPDES) permitting program and Natural Resources Conservation Services Comprehensive Nutrient Management Plans (CNMPs) to develop and implement strict oversight protocols for the application of dry manure so that it does not exceed agro-economic standards.

Overview of National Pollutant Discharge Elimination System Permitting: The NPDES permitting program was created by the Clean Water Act, and the program addresses water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES permit program authorizes state governments to perform permitting, administrative, and enforcement aspects of the program.¹

Natural Resources Conservation Services Comprehensive Nutrient Management Plans: CNMPs are conservation plans unique to livestock operations. CNMPs document practices and strategies adopted by livestock operations to address natural resource concerns related to soil erosion, livestock manure, and disposal of organic byproducts.² A CNMP contains records of the current activities on a livestock operation, an evaluation of the existing environmental risks, and proposals to reduce the risk of negative impacts to the environment. The objective of a CNMP is to ensure that both farm production and realization of environmental goals, such as clean water, clean air, and healthy soils, are achieved on the farm.³

Issues with excessive manure application: Although manure is a valuable fertilizer when applied properly, it represents a public health and ecological hazard when improperly managed. CAFO-generated manure has constituents and byproducts of health concern including residual antibiotics, pathogens, bacteria, hormones, nitrogen, and phosphorus.⁴ Nitrogen in manure may be converted through the action of soil bacteria to the nitrate form which, if not used by plants, can move through soil and into groundwater.⁴ High nitrate levels in drinking water can cause significant health problems.⁴ The 34.2 million Americans who rely on private wells for drinking water are particularly at risk.⁵ The phosphorus in manure can also affect lake and stream water quality by causing weed and algae growth.⁴

RECOMMENDED POLICY CHANGES

The federal and state governments should invoke the NPDES permitting program and Natural Resources CNMPs to develop and implement strict oversight protocols for the application of manure so that it does not exceed agro-economic standards. For the implementation of these oversight protocols, the federal government must address and resolve the lack of resources for proper oversight.

Federal and state governments and agencies should develop guidelines for inspection similar to other Environmental Protection Agency guidelines for inspection already in existence. The following are examples of potential guidelines:

- ▶ Require (at least) annual surface and groundwater testing to measure nitrate content on fields where manure is applied.
- ▶ Require (at least) annual surface, groundwater, and soil testing to measure the total phosphorus content.
- ▶ Require CAFOs to certify no less often than annually that their application of manure does not exceed the levels specified by regulators, and to prove that excess manure was safely stored or safely diverted off-site.
- ▶ Require that adequate resources are available for aforementioned testing.

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ACTION 7:

REQUIRING FEDERAL ZONING GUIDELINES MANDATING A PRE-PERMIT ENVIRONMENTAL IMPACT STUDY AND HEALTH IMPACT ASSESSMENT

Action Step 7 requires:

The federal government develops baseline federal zoning guidelines for food animal production facilities that set a framework for state regulation and require a rigorous, pre-permit environmental impact study and a health impact assessment. The guidelines do not prevent states and counties from enacting even more comprehensive zoning laws. The required impact study includes an assessment of the cumulative effects of food animal production facilities located in vulnerable low income, minority, and economically distressed communities.

Overview of the National Environmental Policy Act (NEPA): In the United States, the National Environmental Policy Act (NEPA), Section 102(2)(c), directs federal agencies to include an Environmental Assessment with every proposal for legislation or major federal action significantly affecting the human environment.¹

The assessment must address:

- ▶ The environmental impacts of the proposed action
- ▶ Unavoidable adverse impacts of the proposal
- ▶ Alternatives to the proposed action
- ▶ The relationship between local short-term uses versus maintenance and enhancement of long-term productivity
- ▶ Irreversible/irretrievable commitments of natural resources.²

The International Association for Impact Assessment defines an environmental impact assessment as “the

process of identifying, predicting, valuating, and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made.”³

NEPA differs from action-enforcing environmental statutory programs such as the Clean Air Act or Clean Water Act, as it does not impose substantive mandates. The purpose of an environmental impact assessment is to assess the expected impact of a proposed activity on the environment before a decision is made to implement the proposal, and to develop and assess measures to avoid or minimize those impacts if the proposal is adopted.³

NEPA affects private parties only when there is a federal “handle” on a proposed private action: e.g., required federal permits, licenses, grants, loans, or use of federal resources. Thus, under current law, an environmental impact assessment is only required for CAFOs when federal permits, licenses, grants, loans, or federal natural resources will be used for the construction or expansion of the CAFO; and, under 81 Fed. Reg. 51274, 51281, only when the CAFO is considered to be large. However, review of small and medium-sized CAFOs generally only requires environmental screening worksheets.⁴

The Trump administration has proposed significant changes to NEPA that would make it easier for federal agencies to approve infrastructure projects without considering their environmental impact. Specifically,

the law would broaden the category of projects that will be exempt from NEPA regulations, and would no longer require federal environmental review of construction projects that do not receive “substantial government funding.”⁵

Overview of Health Impact Assessments: A health impact assessment uses a combination of tools to judge a policy, program, or project for its potential effects on the health of a population, and the distribution of those effects within the population. Recommendations are produced by decision-makers and stakeholders, and choices are made about alternatives, with the aim of maximizing the proposal’s positive health effects and

minimizing the negative health effects.⁶ The impact assessment process consists of screening, scoping, appraisal, reporting, and monitoring.⁶ A Health Impact Assessment is *not* currently required under NEPA.

Overview of Federal Zoning Guidelines: State planning laws and local zoning ordinances are used to regulate land use. Many states have adopted legislation that exempts CAFOs from zoning regulations. “Right to farm” statutes seek to “limit the circumstances under which agricultural operations can be deemed nuisances,” and thus provide a shield from liability for CAFOs.⁷ Zoning guidelines do not currently exist for CAFOs at the federal level.⁷

RECOMMENDED POLICY CHANGES

The federal government should:

- 1) **Strengthen NEPA** by:
 - a) Rejecting the Trump administration’s changes to NEPA
 - b) Adding a Health Impact Assessment to NEPA, so that NEPA includes both an Environmental Impact Assessment and a Health Impact Assessment
- 2) Develop federal **zoning guidelines** for food animal production facilities that set a framework for state regulation and provide additional public health protection for individuals living and working near these facilities. The federal government has the ability to enact zoning guidelines that apply to federal CAFOs, and all privately owned CAFOs, when the government has a federal handle on the CAFO: e.g., federal permits, licenses, grants, loans, or uses federal lands or resources (equivalent to NEPA affecting private parties when there is a “federal handle” on the private action). With this change, a vast majority of CAFOs would thus be covered by the federal zoning guidelines.

These guidelines should act as a *baseline*, such that states and counties are not prevented from enacting more comprehensive zoning laws. Furthermore, the federal zoning guidelines should require an assessment under the strengthened NEPA (refer to proposal 1).

Federal zoning guidelines should be embedded in an existing law (though the guidelines may also stand alone). Federal zoning guidelines would fit well as a section under 43 C.F.R. § 1601, where the federal environmental impact statement policy is located.⁸

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ACTION 8:

REQUIRING REMOVAL OF EXEMPTIONS FOR AGRICULTURAL OPERATIONS FROM THE OCCUPATIONAL SAFETY AND HEALTH ACT

Action Step 8 requires:

The federal government removes exemptions for agricultural operations from the Occupational Safety and Health Act, including exempting agricultural operations from inspection and enforcement of labor laws based on the number of employees.

Overview of OSHA laws that pertain to CAFO workers:

The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration (OSHA) to ensure safe and healthful working conditions for US workers through the enforcement of standards, education, and training.

Overview of the CAFO exemption mentioned:

Farming operations with fewer than 10 employees (not including family members) and that do not provide temporary housing for workers are exempt from the OSHA rules, regulations, and standards.¹ A “farming operation” means any operation involved in the growing or harvesting of crops, the raising of livestock or poultry, or related activities conducted by

a farmer on sites such as farms, ranches, orchards, dairy farms or similar farming operations. This means that the agency cannot use federal funds to inspect or cite these operations.

Many CAFOs have few employees and lack temporary housing, and therefore are exempt from the OSHA rules, regulations and standards. But protection is crucial for CAFO workers, who are often exposed to harmful waste particles, pathogens and antibiotic-resistant bacteria due to unsafe working conditions.¹ Due to the hazardous work environment, CAFO workers experience high rates of injuries and adverse health effects, including burning eyes, muscular pain, headaches, coughing and nausea.² However, even under current OSHA protections, there are few regulations that would apply to livestock agricultural workers. Most of the regulations pertain to issues regarding crop work, such as pesticide exposure, harvesting injuries and heat shock.

RECOMMENDED POLICY CHANGES

- ▶ Remove all exemptions for agricultural operations from the Occupational Safety and Health Administration, meaning any operation, regardless of the number of employees and if they offer temporary housing, will be subject to inspection and enforcement of the labor rules and regulations, which work to ensure a safe workplace for all.
- ▶ Include new OSHA rules specific to livestock agriculture, such as rules that govern maximum hours of work and monitor and limit adverse health effects from occupational exposure to contaminants.

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ACTION 9:

REQUIRING INCREASED FUNDING FOR RESEARCH ON AND DISSEMINATION OF GOOD ANIMAL PRODUCTION PRACTICES THAT WILL BENEFIT THE ENVIRONMENT, PUBLIC HEALTH, AND RURAL COMMUNITIES

Action Step 9 requires:

Federal and state governments increase funding for research on and dissemination of food animal production practices that will be beneficial to the environment, public health, and rural communities, and offer funding and technical assistance to farmers to adopt these practices.

Overview of Farm Bill programs that support sustainable agriculture research: A number of farm bill programs are allocated for sustainable agriculture research, which covers research the USDA conducts internally, as well as competitive grants to external actors, such as farmers and organizations. Some of these farm bill provisions include:

- ▶ Sustainable Agriculture Systems Research Program (SASR)
- ▶ Agriculture and Food Research Initiative (AFRI)

- ▶ National Sustainable Agriculture Information Service (ATTRA)
- ▶ Organic Agriculture Research and Extension Initiative (OREI)
- ▶ Organic Transitions Program (ORG)
- ▶ Specialty Crop Research Initiative (SCRI)
- ▶ Sustainable Agriculture Research and Education (SARE)

In order to expand knowledge and viability for sustainable animal production, more farm research and development is needed. The National Sustainable Agriculture Coalition (NSAC) has identified research needs in specific areas, such as, “rotational grazing, grass based meat and dairy production, sound husbandry techniques, and the integration of livestock into existing cropping systems”.¹

RECOMMENDED POLICY CHANGES

- ▶ Enhance federal and state funding for animal production research, education, and outreach in order to support a transition to more sustainable and regenerative models.
- ▶ Appropriate new funding for farm bill programs committed to research for sustainable production, including but not limited to, SASR, AFRI, ATTRA, OREI, ORG, SCRI and SARE.

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ACTION 10:

ELIMINATING WASTE-MANAGEMENT SUBSIDIES CAFOS RECEIVE UNDER EQIP

Action Step 10 requires:

The federal government eliminates waste-management subsidies CAFOs receive under the Environmental Quality Incentive Program (EQIP).

Overview of EQIP reporting requirements: EQIP is a voluntary conservation incentive program that helps farmers and ranchers adopt conservation practices on working agricultural land and nonindustrial private forest land through financial and technical assistance. The program is administered by the USDA's Natural Resource Conservation Service (NRCS) and provides up to 75 percent of the cost of a conservation project (and up to 90 percent for socially-disadvantaged, beginning, and veteran farmers and for certain water quality practices) which includes structural, vegetative, and management practices. EQIP payments can be made for income forgone as well as costs incurred in almost any stage of project design and implementation.

RECOMMENDED POLICY CHANGES

USDA should consider shifting EQIP evaluation guidelines to reward creativity and efficacy, and should prioritize support for small and mid-sized producers who have the least capacity to afford conservation investments. NRCS should eliminate the use of EQIP funds to support waste storage and related facilities

Overview of the waste-management subsidies under EQIP: At the federal level, 50 percent of total EQIP funding is set aside for livestock operations without limits to funding directed to CAFO-style farming operations. In some states, NRCS reserves a share of EQIP funds for CAFO projects even though other conservation projects provide more environmental benefits. According to the National Sustainable Agriculture Coalition, in fiscal year 2016, 11 percent (\$113 million) of EQIP funds were allocated toward CAFO operations, and top supported practices included waste storage facilities (\$51,634,622); waste facility covers (\$33,582,510); animal mortality facilities (\$8,867,865); and manure transfer (\$7,779,326).¹ Because such a large percentage of funding supports CAFO-style production, smaller operations that use innovative, alternative sustainable management practices such as rotational grazing receive less support.

for new or expanding CAFOs, should prioritize funding for sustainable management practices (such as rotational grazing practices), and promote the inclusion of grazing practices in the livestock set-aside.

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ACTION 11:

REQUIRING EQIP FUNDING AND FSA LOANS GO TO SMALL AND MEDIUM-SIZED OPERATIONS AND REQUIRE ENVIRONMENTAL AND HEALTH IMPACT ASSESSMENTS

Action Step 11 requires:

The federal government directs Environmental Quality Incentives Program (EQIP) funding and Farm Service Agency (FSA) loans to small and medium-sized operations rather than CAFOs, and requires a rigorous environmental and public health assessment as part of the approval process.

Overview of EQIP funding and FSA loans to CAFOs:

EQIP is a voluntary conservation incentive program that helps farmers and ranchers adopt conservation practices on working agricultural land and nonindustrial private forest land by providing financial and technical assistance. The program is administered by the U.S. Department of Agriculture's (USDA) Natural Resource Conservation Service (NRCS) and provides up to 75 percent of the cost of a conservation project (and up to 90 percent for socially-disadvantaged, beginning, and veteran farmers and for certain water quality practices) if it includes structural, vegetative and management practices. EQIP payments can be made for income forgone as well as costs incurred in almost any stage of project design and implementation. These grants provide essential opportunities for farms to enhance their resilience in the face of erratic temperatures and extreme weather from climate change.

The USDA Farm Service Agency (FSA) guarantees loans to promote conservation practices on farms and ranches in order to protect soil and water resources. These loans are available for both small and large farm

operations. There are two types of FSA loans: direct loans, which come from USDA funds, and guaranteed loans, which come from private lenders. Beginning and socially disadvantaged farmers and ranchers are given priority through loan set asides.¹

Overview of CAFO eligibility for EQIP funding and exemptions for FSA loans:

At the federal level, 50 percent of total EQIP funding is set aside for livestock operations, without limits to funding directed to CAFOs. In some states, NRCS reserves a share of EQIP funds for CAFO projects even though other conservation projects provide more environmental benefits. According to the National Sustainable Agriculture Coalition, in fiscal year 2016, 11 percent (\$113 million) of EQIP funds were allocated toward CAFO operations, and top supported practices included waste storage facilities (\$51,634,622); waste facility covers (\$33,582,510); animal mortality facilities (8,867,865); and manure transfer (\$7,779,326).² Because such a large percentage of funding supports CAFO-style production, smaller operations that use innovative, alternative sustainable management practices such as rotational grazing receive less support. The 2014 Farm Bill eliminated an EQIP rule that large projects over \$150,000 require a review from a regional conservationist. This poses an advantage to larger, industrial projects, such as Confined Animal Feeding Operations (CAFOs).³

FSA: A 2016 rule change allows medium CAFOs to receive federal funds without performing an environmental review.⁴ A medium CAFO can hold up to 999 cows, 54,999 turkeys or 124,999 hens.⁴

The FSA states that categorical exclusions “have been determined by the agency to have little or no effect on

the environment.”⁵ A dozen organizations, including the Institute for Agriculture and Trade Policy and Food & Water Watch, have filed a lawsuit against this rule change. They argue that environmental reviews are essential to protect communities from the adverse effects of CAFOs and that this exemption benefits the corporations practicing industrial animal production.⁵

RECOMMENDED POLICY CHANGES

- ▶ Eliminate all exemptions for any industrial animal operation receiving federal loans to skip the environmental review process.⁶
- ▶ USDA should consider shifting EQIP evaluation guidelines to reward creativity and efficacy to ensure that taxpayer money is spent on worthwhile projects, and should prioritize support for small and mid-sized producers who have the least capacity to afford conservation investments.
- ▶ NRCS should eliminate the use of EQIP funds to support waste storage and related facilities for new or expanding CAFOs. NRCS should prioritize funding for sustainable management practices (such as rotational grazing practices), and promote the inclusion of grazing practices in the livestock set-aside.

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ACTION 12:

REQUIRING THAT ENVIRONMENTAL JUSTICE AND EQUITY ISSUES ARE ADDRESSED IN PERMITTING DECISIONS

Action Step 12 requires:

The federal government addresses environmental justice and equity issues in permitting decisions for projects with the potential to disparately impact communities in violation of Title VI of the Civil Rights Act of 1964.

Overview of Environmental Justice and CAFOs: Studies have established that sources of environmental hazards are concentrated in communities with a disproportionately high population of people of color (including indigenous peoples).¹ Studies also show that these groups often experience higher exposures to environmental hazards associated with the places where they live, work, and play.² Furthermore, these population groups tend to be more burdened with adverse health conditions that have environmental triggers, such as cardiovascular disease, preterm birth, low birth weight, and asthma.³

Environmental Equity refers to “the equitable sharing of environmental impacts by a community. Environmental policies and laws strive to ensure that no one group or community bears a larger, unfair share of harmful effects [considered in light of existing vulnerabilities] from pollution or environmental hazards.”⁴

According to the Environmental Protection Agency (EPA), environmental equity can be broken down into two categories: fair treatment and meaningful involvement. Fair treatment means that no single community should be disproportionately affected by environmental crises as a result of laws or policies.

Meaningful involvement means that groups should have the opportunity to participate in a meaningful way regarding decisions that affect their health or their environment, and that their input will be taken seriously and considered in decision making.⁵

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.⁶ In 1994, Executive Order 12898 was issued to direct federal agencies to incorporate achievement of environmental justice into their mission. Specifically, the memorandum stated that each federal agency shall ensure that all federally funded programs that affect human health or the environment do not discriminate on the basis of race, color, or national origin.⁷ The memorandum also recognized the importance of procedures under the National Environmental Policy Act (NEPA) for addressing environmental justice concerns.

With that directive in mind, a committee was established with representatives from many federal agencies. This committee, the Interagency Working Group on Environmental Justice (EJIWG), is chaired by the EPA, and was created to “identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of federal programs, policies, and activities on minority populations and low-income populations”.⁸

Despite Executive order 12898, the accompanying presidential memorandum, and the establishment of EJIWG, studies have established that sources of environmental hazards are still located and concentrated

in communities of color.³ The Trump administration has also cut the budget for the Office of Environmental Justice and decreased enforcement of environmental justice related issues.⁹

RECOMMENDED POLICY CHANGES

The federal government should act in accordance with executive order 12898, its accompanying presidential memorandum, and the EJIWG to actively address environmental equity issues in permitting decisions for projects with the potential to disparately impact

communities protected against discrimination by Title VI of the Civil Rights Act of 1964. Furthermore, the federal government should ensure that NEPA remains a vital mechanism for achieving environmental justice.

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