

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

# ACTION 6: REQUIRING STRICT OVERSIGHT PROTOCOLS FOR THE APPLICATION OF DRY MANURE

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 is one of a series of briefs concerning the action steps that must be met before the APHA's call for a moratorium will be lifted. This document focuses on Action Step 6, and provides additional information pertinent to this action step.

### 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.<sup>1</sup>

**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.<sup>2</sup> 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.<sup>3</sup>

**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.<sup>4</sup> 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.<sup>4</sup> High nitrate levels in drinking water can cause

significant health problems.<sup>4</sup> The 34.2 million Americans who rely on private wells for drinking water are particularly at risk.<sup>5</sup> The phosphorus in manure can also affect lake and stream water quality by causing weed and algae growth.<sup>4</sup>

## 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.

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.

For more information contact: Sarah Goldman ([sgoldm17@jhu.edu](mailto:sgoldm17@jhu.edu))

## REFERENCES

---

1. US EPA. National Pollutant Discharge Elimination System (NPDES). US EPA. <https://www.epa.gov/np-des>. Published August 6, 2014. Accessed April 2, 2020.
2. Comprehensive Nutrient Management Plan (CNMP) | NRCS. [https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrcs142p2\\_020843](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrcs142p2_020843). Accessed April 2, 2020.
3. U.S. Department of Agriculture, Natural Resources Conservation Service. Conservation Assistance in Connecticut Comprehensive Nutrient Management Plans. [https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1166381.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1166381.pdf).
4. cafo\_proposed\_env\_assess\_ch1-3.pdf. Accessed May 14, 2020. [https://www3.epa.gov/npdes/pubs/cafo\\_proposed\\_env\\_assess\\_ch1-3.pdf](https://www3.epa.gov/npdes/pubs/cafo_proposed_env_assess_ch1-3.pdf)
5. NEPIS: EPA. Literature Review of Contaminants in Livestock and Poultry Manure and Implications for Water Quality. US EPA. <https://nepis.epa.gov/Exe/ZyNET.exe/P100H2NI.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000008%5CP100H2NI.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>. Published July 2013. Accessed April 2, 2020.